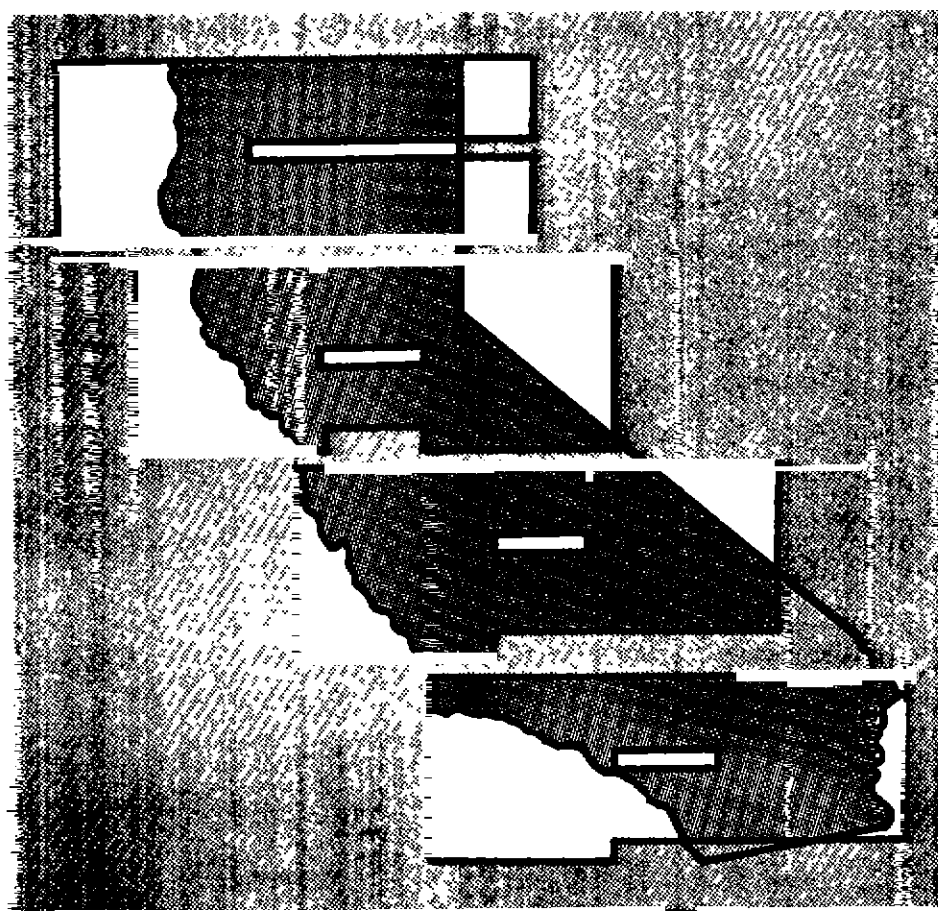


EVALUATION OF THE CALIFORNIA ACADEMIC PARTNERSHIP PROGRAM (CAPP)



CALIFORNIA POSTSECONDARY
EDUCATION COMMISSION



EVALUATION OF THE CALIFORNIA ACADEMIC PARTNERSHIP PROGRAM (CAPP)

*A Report to the Legislature
in Response to Assembly Bill 2398
(Chapter 620, Statutes of 1984)*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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Summary

Through Assembly Bill 2398 (1983, Hughes), the Legislature and Governor directed the California Postsecondary Education Commission to evaluate the California Academic Partnership Program (CAPP), which funds cooperative efforts between California's public schools, colleges, and universities aimed at improving the academic quality of the schools and thereby increasing the preparation of all their students for higher education. AB 2398 directed the Commission to include in its assessment "indicators of increases in the number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the programs by participating school districts and postsecondary institutions, together with recommendations from the Commission for the improvement of the program "

This report fulfills the Commission's responsibilities under that law. Part One on pages 3-8 of the report explains the history of the California Academic Partnership Program. Part Two on pages 9-18 describes the 20 curriculum development projects funded by the program between 1984 and 1987 and assesses their effectiveness. Part Three on pages 19-24 analyses and assesses the three diagnostic testing projects funded over the same period. Part Four on pages 25-26 contains the Commission's eight conclusions about these projects, and Part Five on pages 27-28 presents its six recommendations about the total program, including its continuation, administration, funding, dissemination of findings, and further evaluation.

The Commission adopted this report at its meeting on March 21, 1988, on recommendation of its Policy Evaluation Committee. Additional copies of the report may be obtained from the Library of the Commission at (916) 322-8031. Questions about the substance of the report may be directed to Bruce D. Hamlett, the Commission's Director of Legislative Affairs and Budget Analysis, at (916) 322-8010.



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Executive Summary

ASSEMBLY BILL 2398 (1983, Hughes) directed the California Postsecondary Education Commission to submit an evaluation of the California Academic Partnership Program (CAPP) to the Legislature by January 1, 1988 and to include in it "indicators of increases in the number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the programs by participating school districts and postsecondary institutions, together with recommendations from the Commission for the improvement of the program "

Because of delays encountered by the California State University in gathering data for the Commission's evaluation, this report was delayed until March 1988. In it, the Commission offers six conclusions about the 20 curriculum development projects funded by CAPP between 1984 and 1987, and two about CAPP's three diagnostic testing projects (pp 25-26)

Curriculum development projects

- 1 The 20 curriculum development projects have a mixed record of success in achieving their objectives, with some of the projects clearly outstanding, some effective, and several ineffective. The successful projects had a positive impact on students in increasing postsecondary enrollments and improving preparation for baccalaureate work
- 2 CAPP has stimulated meaningful school and college partnerships involving the University of California, the California State University, the California Community Colleges, and independent colleges and universities in the areas of curriculum development and teacher in-service training. Replication of these partnerships in other regions of the State would be beneficial
- 3 Effective school and college partnerships are characterized by several important elements, which are described on pages 6 and 7 of this report. The evaluation of the 20 curriculum development

projects validates the importance of these elements and illustrates the particular importance of (1) mutual trust and respect among faculty and (2) the quality of the individuals, both in administrative and teaching roles, who have primary responsibility for development of the partnership roles

- 4 While the operation of CAPP has included extensive evaluation activities, these activities have not resulted in the information necessary for drawing conclusive statements about the impact of the program in improving the preparation of students for college. The Chancellor's Office of the California State University and the CAPP advisory committee have reached the same conclusion and have devised an evaluation plan for the 1987-90 projects that will be more outcome oriented
- 5 The direct involvement and commitment of the program advisory committee and the statewide liaison representatives have been essential to the development and implementation of the projects
- 6 Despite some initial difficulties, the administration of the program by the Office of the Chancellor of the California State University appears satisfactory

Diagnostic testing projects

- 7 The Mathematics Diagnostic Testing Project has demonstrated considerable success, experiencing increasing demand from mathematics teachers and secondary schools from throughout the State, and utilizing a growing share of the resources of CAPP
8. The two diagnostic testing instruments developed in composition and writing, although effective, do not appear to be usable statewide because of their high cost.

Based on these conclusions, the Commission offers six recommendations about the future of the Califor-

nia Academic Partnership Program (p 27)

- 1 The California Academic Partnership Program should be continued and current funding levels maintained, with appropriate cost-of-living adjustments, pending a second comprehensive program evaluation by January 1991
- 2 Annual reports should be required of each CAPP project and a comprehensive program evaluation should be conducted prior to January 1991, and every third year thereafter, by the Office of the Chancellor of the California State University. The report of this comprehensive evaluation should be submitted to the Legislature, the Governor, and the Postsecondary Education Commission, and the Commission should review and comment on these evaluations as appropriate
- 3 The design for the comprehensive program evaluation should be jointly developed by the California State University, the California Postsecondary Education Commission, and the CAPP advisory committee. The evaluation should be outcome oriented and should include a follow-up study to determine the ongoing impact of CAPP on students, teachers, and the curriculum
- 4 The present administration of CAPP by the California State University as an intersegmental program should be continued
- 5 The Mathematics Diagnostic Testing Project should be funded by the Legislature and Governor for implementation on a statewide basis with test materials and scoring services available to all California mathematics teachers in secondary schools and Community Colleges who request them. Staff of the State University's Office of the Chancellor should work with the Intersegmental Budget Committee to develop and submit to the Department of Finance budget requests for the Mathematics Diagnostic Testing Project as well as the California Academic Partnership Program for inclusion in the 1989-90 budget
- 6 CAPP project staff and participants should be encouraged, supported, and expected to make presentations at appropriate curriculum and professional workshops and conferences for both schools and colleges, in order to disseminate project information on intersegmental approaches to enhance the preparation of secondary school students for college

Origins and goals of the program

The California Academic Partnership Program (CAPP) was initially established under the Hughes-Hart Educational Reform Act of 1983 (Senate Bill 813 and Section 11000 of the *Education Code*) as a way to "provide academic and counseling services to students in grades 7 to 12, and to increase the involvement of postsecondary educational institutions in efforts to improve the academic quality of public secondary schools." The program was one of a series of reforms incorporated in Senate Bill 813, which also included increased graduation requirements, increased instructional time within the school day, and a longer school year. At the same time, the University of California and the California State University were reviewing and increasing their requirements for admission.

The following year, the Legislature passed Assemblywoman Teresa Hughes' Assembly Bill 2398 (reproduced in Appendix A), which expanded the scope of the California Academic Partnership Program by providing that its purpose was also to "develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college." The goals of CAPP were to implement the concepts embodied in the legislation and, if its evaluation indicated, continue the program as an important part of the educational systems in California.

Administration of the program

CAPP is administered by the Trustees of the California State University in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the State Superintendent of Public Instruction. All fiscal and administrative matters relative to the conduct of the program are the responsibility of a director hired by the Chancellor of the State University. The program has had two directors in the three

years of its existence, with the current director, Deborah Osen Hancock, hired on September 1, 1986.

Work and members of the advisory committee

An important element in the program has been the active involvement of its advisory committee, which was charged in AB 2398 "to assist in selecting proposals to be funded and developing criteria for project evaluation." The committee has met periodically to complete this activity. It currently consists of the following individuals:

- Robert O. Bess, Executive Vice President, California State University, Sacramento, representing the Office of the Chancellor, The California State University;
- Dennis J. Galligani, Assistant Vice Chancellor for Academic Affairs, University of California, Irvine; representing the Office of the President of the University of California;
- William R. Ellis, Professor of Architecture, University of California, Berkeley; representing the Academic Senate of the University of California;
- Nancy Gray, Consultant, Language Arts (Secondary), Long Beach Unified School District; representing the California State Department of Education;
- Levell Holmes, Professor of History, Sonoma State University; representing the Academic Senate of the California State University;
- Doug Kirkpatrick, Science Teacher, Foothill Intermediate School, Mt. Diablo Unified School District; representing the California State Department of Education;
- Linda Morales, Science Teacher, Kern Union High School District; representing the California State Department of Education.

- Hilda Solis, Director, South Coast EOPS Consortium, representing Cal-SOAP;
- Donald Villeneuve, Professor of Biology, Ventura College, representing the Academic Senate for the California Community Colleges,
- Patricia Wainwright, Dean of Student Services, Los Angeles Harbor College, representing the Chancellor of the California Community Colleges,
- Linda Barton White, Postsecondary Education Specialist, California Postsecondary Education Commission, representing the Commission, and
- Shereene D Wilkerson, Vice Principal, Willis Jepson Junior High School, Vacaville Unified School District; representing the California State Department of Education, *Chair*

The following individuals serve as liaison between each segment and CAPP:

- Connie Anderson, Dean, Transfer Education and Articulation, California Community Colleges
- Stephanie McGraw, Dean, Outreach and Retention, The California State University
- Barbara Brandes, Administrator, Special Programs Unit, California Department of Education
- Sandra Douglas, Coordinator, Academic Skills and Remediation, University of California
- Sherryl Lucarelli, Director, Letters, Arts, and Sciences Academic Relations, University of Southern California, representing the Association of Independent California Colleges and Universities.

Components of CAPP

CAPP has two major components -- curriculum development and diagnostic testing. Its curriculum development projects focus on improving the secondary school curriculum, while its diagnostic testing projects seek to assess student abilities in specific subject matters -- specifically, writing and mathematics. Both components were to be implemented utilizing partnerships between K-12 districts and institutions of higher education, and with special emphasis placed on underrepresented students.

Curriculum development projects

AB 2398 authorized curriculum development projects that "address improvements in secondary school curriculum and the ability of students to benefit from these improvements." During the first two funding cycles, 1984 to 1987, CAPP funded 20 pilot curriculum development projects.

- 1 Five Star Academic Partnership -- Fillmore
- 2 A Junior MESA Program for Rural and Metropolitan Students -- Bakersfield
- 3 Ethnic Literature: A Model for Teaching Critical Thinking Skills -- Sacramento
- 4 Language Instruction Across the Content Areas: Learning From Text -- Northridge
- 5 Academic Partnership to Improve Social Studies Curriculum -- Sonoma
- 6 High School/College Partnership Produces Prepared Students -- Sacramento
- 7 Project Step -- Irvine/Santa Ana
- 8 Gateways Through Academic Partnership -- Watsonville
- 9 College Partnership Produces Prepared Students -- Montebello
- 10 The Quantitative Educational Development Project -- San Diego
- 11 Linking Resources for Students Underrepresented in Higher Education -- Santa Barbara
- 12 Mathematics: New Courses in the 9-12 Academic Preparation Sequence -- Davis
- 13 Academic Partnership to Improve College Preparation -- Wilmington
- 14 College Aspiration Partnership Program -- Irvine/ABC/Cerritos
- 15 The Mathematics Awareness and Skill Development Program -- Whittier
- 16 The College Preparatory Tutorial Center Project -- Dominguez Hills/Lawndale
- 17 Comprehensive Math and Language Articulation and Tutorial Program -- Chula Vista
- 18 Science and English Curriculum Project -- Hayward (one year only)

- 19 Social Studies and Science Curriculum Development in Three Strands -- Vacaville
- 20 Stockton Honors Advancement Placement Recognition Program (SHARP) -- Stockton

For 1987-88, the advisory committee recommended funding two continuing projects and seven new projects. The two continuing projects are

- 1 Gateways Through Academic Partnerships -- Watsonville
- 2 Project STEP -- Irvine/Santa Ana

The seven new projects are

1. Language and Content Enrichment -- Long Beach
2. Academic Partnerships in Science Education -- Pasadena
3. Develop Model Math and Science Curriculum -- Bakersfield
4. Teaching for Transition from High School to College -- Merced
5. An Across the Curriculum Academic Partnership -- Oakland
6. Life Science Instruction and Postsecondary Access -- Oakland
7. Strategies Improving Academic Preparation -- Oroville

During the current funding cycle of 1987-1990, the two continuing projects in Watsonville and Santa Ana have been distinguished as "Showcase" projects designed to serve as models of maturing academic partnerships successful in establishing comprehensive approaches to curriculum development. The Commission describes all of these projects in Appendix B, but in this evaluation report it analyzes only those funded from 1984 through 1987.

All curriculum development projects are designed to enhance the academic preparation for college of all students, but especially those underrepresented in postsecondary education. Their unique feature is collaboration between faculty at postsecondary educational institutions and teachers in junior and senior high schools. The desired outcome of this collaboration is improved secondary school curricula that result in more students being better prepared for college.

The methods employed by the curriculum projects in meeting their objectives include:

- team teaching between high school teachers and university faculty,
- workshops for students and teachers,
- diagnostic testing of students;
- tutorials for students,
- student orientation activities and field trips to campuses and
- summer and Saturday institutes for teachers

Diagnostic testing projects

AB 2398 also called for "a voluntary cooperative program for the academic assessment of secondary school students in the state" in order to analyze their readiness for college-level work, identify their academic needs to secondary teachers and counselors, and reduce the demand for remedial programs at the postsecondary level. These projects have been identified as *diagnostic testing* projects, three of which were funded by CAPP between 1984 and 1987 in mathematics and writing -- the Mathematics Diagnostic Testing Project that serves high school teachers throughout the State, and two writing diagnostic testing projects, one in northern California -- the High School Diagnostic Testing Program in Composition -- and the other in southern California -- the Writing Exam for Eleventh Graders.

The Mathematics Diagnostic Testing Project continues to be supported by CAPP funds, but both writing projects were discontinued as diagnostic testing projects in the second funding cycle of 1987 to 1990 because of their high cost per student. CAPP has funded the southern California project as a dissemination project for 1987-88, however, in order to produce a book of materials and evaluation techniques gathered by it.

Funding history

In 1984, CAPP received \$1 million from the Legislature to begin operation. In the first year (1984-85), it funded 13 curriculum development projects and three diagnostic testing projects. In the second and third years of funding (1985-86 and 1986-87), it

increased the number of curriculum development projects to 20 while retaining the same number of diagnostic testing projects. Display 1 below shows the funding history for the program.

Characteristics of collaborative efforts

Many efforts have been undertaken over recent decades to revise the secondary school curriculum and help secondary school students prepare for postsecondary education. During the 1950s, college professors and secondary school teachers collaborated nationally in revising the curriculum in the sciences, with the outcome of the "new math" and new chemistry and physics curricula. Although this close cooperation between college faculty and secondary school teachers eventually waned, it nonetheless demonstrated that such a partnership between college and secondary faculty was possible. During the 1960s and '70s, university faculty and students were more oriented to providing direct ser-

vices to secondary school students, but this approach was restricted by the small amount of time college faculty and students could devote to the schools and the limited number of students whom they reached.

CAPP's curriculum development projects return to the proven position that interested higher education faculty working directly with committed secondary teachers and active administrative support can improve the curriculum and positively affect students' preparation for college.

The literature on the subject of partnerships presents a guide to characteristics of successful academic collaboration. For example, in *School and College Partnerships in Education* (1983) Gene Maeroff identified five basic principles of successful collaborative efforts:

1. Educators at both levels must agree that they, indeed, have common problems.
2. The traditional academic "pecking order" must be overcome.
3. Cooperative projects must be sharply focused.

DISPLAY 1 *History of CAPP Funding, 1984 Through 1988*

<u>Source</u>	<u>Total Program Funding</u>			
	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>
State Funds	\$1,000,000	\$1,410,000	\$1,508,000	\$1,524,000
Matching Funds	507,000	1,712,000	1,627,000	969,000
Total	\$1,507,000	\$3,122,000	\$3,134,000	\$2,494,000

<u>Project or Activity</u>	<u>State Funding by Type of Project or Activity</u>			
	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>
Curriculum Development	\$647,000	\$830,000	\$ 712,000	\$ 646,000
Percent of Total	65%	59%	47%	42%
Diagnostic Testing	247,000	371,000	488,000	560,000
Percent of Total	25%	26%	32%	37%
Administration	106,000	209,000	308,000	318,000
Percent of Total	10%	15%	20%	21%
Total	\$1,000,000	\$1,410,000	\$1,508,000	\$1,524,000

Source: California Postsecondary Education Commission

- 4 Those who participate must get recognition
- 5 School-college cooperation must focus on action - not machinery.

Dennis J. Galligani, in his report, *Effective Relationships for School/College Partnerships* (1987) identified nine characteristics existing in successful CAPP partnerships:

- 1 Clear establishment of common goals that are recognized and developed cooperatively. One project described this common effort as "a oneness of purpose."
- 2 Development of mutual trust and respect among faculty. This entails the recognition of teachers as the "experts" in curricular reform.
- 3 Provision of sufficient time to develop and strengthen the relationships among faculty and administrators, including unstructured time for faculty to get to know each other and have the time to think together in order to reach a mutual understanding of each other's contribution to the aims of the curricular enhancement effort. (The importance of food as a catalyst in bringing people together cannot be overestimated.)
- 4 The quality of the individuals, both in administrative and teaching roles, who have primary responsibility for developing the project.
- 5 Continued and constant interaction between administrators and the faculty directly involved in carrying out the curricular enhancement efforts. (Administrative reinforcement appears as crucially beneficial, whereas strict oversight appeared to have a negative impact.)
- 6 Willingness to recognize and understand the different cycles and languages of the various educational segments. (Along these same lines, flexibility is important in dealing with a variety of institutional policies and processes.)
- 7 Periodic formative evaluation to ensure that the activities are effective in reaching commonly and mutually developed goals.
- 8 Shared responsibility and accountability among the segments.
- 9 Crisp lines of communication that are inclusive of individuals within project institutions rather than exclusive.

Such principles are useful both for organizing new collaboration and for evaluating current collaborative efforts such as CAPP.

Evaluation of CAPP

AB 2398 directed the California Postsecondary Education Commission to submit a progress report on CAPP to the Legislature by January 1, 1986, and a final evaluation on or before January 1, 1988, that was to include "indicators of increases in the number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the programs by participating school districts and postsecondary institutions, together with recommendations from the Commission for the improvement of the program."

In December 1985, the Commission published its progress report on CAPP, *Progress of the California Academic Partnership Program*, which emphasized the activities of each of its individual projects. For the present evaluation, the Commission has sought to analyze the program as a whole. Thus, its primary concern in this report is with achievements of the total program and the lessons that can be learned from its model of intersegmental and cooperative university-school partnerships.

Commission staff identified the baseline data which projects should obtain in order to provide the basis for the Commission's evaluation. Appendix C describes the baseline data requested for the curriculum development projects.

The Office of the Chancellor of the State University hired three outside evaluators to collect information from the projects. One of the three collected baseline data from each of the 20 pilot curriculum development projects as well as annual reports on the projects that included impact data from 1985 to 1987. The second evaluator was to assess the writing diagnostic testing projects, utilizing data gathered over the past three years. The third evaluator was to evaluate the mathematics diagnostic testing project. The CAPP advisory committee ultimately decided to consolidate the latter two diagnostic testing evaluations by using one individual rather than two.

The Commission has been assisted in its evaluation by Eugene Brucker, previously acting superintendent of the San Diego Unified School district, and by the firm of Deloitte, Haskins & Sells. Its assessment was also aided by two evaluation sessions held by CAPP during Spring 1987 -- one in northern California and the other in southern California -- in order to get the collective perceptions of project partners regarding successful and unsuccessful experiences in carrying out the curriculum development projects. A detailed description of these findings that provide useful information regarding effective partnerships can be found in *Effective Relationships for School/College Partnerships: A Qualitative Evaluation of the Curriculum Enhancement Projects Participating in the California Academic Partnership Program, 1984-1987*, by Dennis J. Galligan.

For this report, the Commission analyzed all evalua-

tions done to date plus the final reports submitted by the project directors. Several projects did not provide the requested information, and much of the data provided was limited in usefulness, since approximately two-thirds of that submitted by the 20 curriculum development projects was descriptive rather than outcome oriented. District and project data were sometimes interchanged, evaluative data did not, in many cases, lend themselves to analysis, and even where they did, the Commission was unable to separate the impact of CAPP from the impact of other reform activities also included in SB 813.

Like any new pilot program, however, a great deal has been learned during CAPP's initial years of implementation -- including the characteristics of successful partnerships and institutionalizing activities in the schools and activities supportive of curriculum change -- as the following pages will demonstrate.

2

Curriculum Development Projects

IN this section of the report, the Commission describes and assesses the overall operation of CAPP's curriculum development projects as experiments of secondary school teachers and university faculty working cooperatively to prepare students for college-level work.

Criteria for selecting projects

AB 2398 outlined eight criteria that CAPP's advisory committee was to consider when recommending funding for curriculum development projects.

1. The inclusion of a comprehensive plan for curricular revision or enhancement and instructional change.
- 2 The participation of postsecondary campus faculty working as equal partners with secondary school teachers in efforts to improve the quality of college preparatory instruction
- 3 The provision of activities and services designed to enhance the ability of students to benefit from college preparatory curricula
- 4 The provision of in-service training designed to increase college aspirations of students from groups with low participation rates in postsecondary institutions.
- 5 The inclusion of procedures for the independent evaluation of the program budget
- 6 Plans for the participation of more than one secondary school.
- 7 Plans for the inclusion of intermediate or junior high schools in the project.
- 8 Plans for the continuation of the project after funding ceases.

In addition to these eight criteria, AB 2398 encouraged the advisory committee to develop its own criteria, and the committee required school districts

and postsecondary educational institutions to submit a joint application for CAPP funding.

Display 2 on page 10 shows the locations of the 20 projects Display 3 on page 11 lists the major activities of the projects and the frequency of each activity Display 4 on page 12 presents information on the activities utilized in each individual project

Project impact

Whenever several curriculum development or student activity projects are operating in a school or district, it is difficult to separate the impact of a specific individual project from that of others However, because the CAPP projects are not duplicate efforts, some impact can be directly attributed to them, as the following paragraphs will describe

Student participation

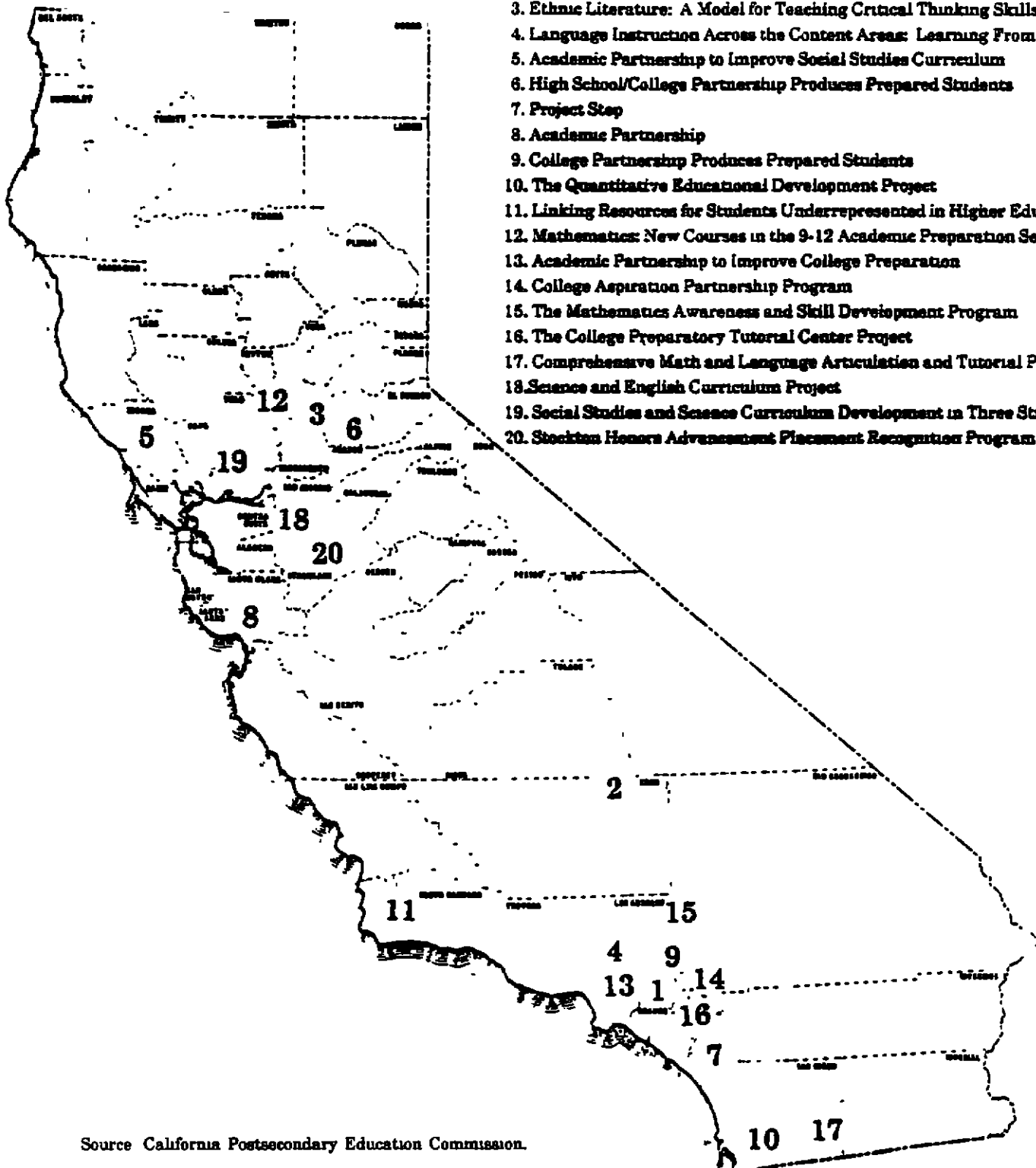
Over 80,800 students benefited directly or indirectly from the 20 curriculum development projects Because some projects focused on teachers and revision of curriculum rather than student services, it is not possible to determine the extent of time spent in direct student services The projects vary widely in the number of pupils they served, with some being quite selective and others reaching large student populations Display 5 at the bottom of page 12 shows the projects' range in number of students served between 1984 and 1987

Participation by ethnicity

One of the purposes of the CAPP legislation was to give funding priority to projects in schools whose students have low participation rates in postsecondary education or come from groups that are underrepresented in postsecondary education Most evaluation reports from the projects included information on the ethnicity of students in the schools, and Display 6 at

DISPLAY 2 Geographical Distribution of CAPP's Twenty Curriculum Development Projects

1. Five Star Academic Partnership
2. A Junior MESA Program for Rural and Metropolitan Students
3. Ethnic Literature: A Model for Teaching Critical Thinking Skills
4. Language Instruction Across the Content Areas: Learning From Text
5. Academic Partnership to Improve Social Studies Curriculum
6. High School/College Partnership Produces Prepared Students
7. Project Step
8. Academic Partnership
9. College Partnership Produces Prepared Students
10. The Quantitative Educational Development Project
11. Linking Resources for Students Underrepresented in Higher Education
12. Mathematics: New Courses in the 9-12 Academic Preparation Sequence
13. Academic Partnership to Improve College Preparation
14. College Aspiration Partnership Program
15. The Mathematics Awareness and Skill Development Program
16. The College Preparatory Tutorial Center Project
17. Comprehensive Math and Language Articulation and Tutorial Program
18. Science and English Curriculum Project
19. Social Studies and Science Curriculum Development in Three Strands
20. Stockton Honors Advancement Placement Recognition Program (SHARP)



Source California Postsecondary Education Commission.

DISPLAY 3 Major Activities of the 20 Curriculum Development Projects

<u>Activity</u>	<u>Number of Projects Conducting This Activity</u>
Curriculum Development	19
Mathematics	12
Science	9
Social Science	4
Language Arts	11
Critical Thinking	7
Writing	2
Tutorial	18
Inservice	17
Guidance	14
Testing	9
Seminars	9
Summer Programs	9
Team Teaching	8
Articulation	4
Field Trips	4
Teacher/Parent Liaison	4
Conferences	3

Note: It should be noted that individual projects utilized multiple activities. One of the projects -- the Science and English Curriculum project in Hayward -- was not able to implement its proposed activities during the first year, and its funding was therefore terminated.

Source: Office of the Chancellor The California State University

the top of page 13 lists the 12 projects that reported the number and percentages of ethnic minority graduates in 1984 and 1985. Projects not listed did not report such data. As can be seen, 10 of the 12 projects involved schools with a majority of minority graduates in 1984, and 11 of the 12 did so in 1985.

In all but one of the projects, the percent of minority graduates remained the same or increased between 1984 and 1985, while in seven the actual number of graduates increased. As Display 6 illustrates, all of the projects except for one -- Santa Barbara -- had a larger participation rate by ethnic minority students than the statewide rate for high school graduates, and consequently the Commission concludes that

the projects were successful in assisting underrepresented students

Students completion of "A-F" requirements

The number of students in project schools who enrolled in courses fulfilling the University of California's "a-f" course requirements is a second measure of CAPP's effectiveness. Using 1984-85 as a baseline year, 15 projects showed an increase within one year in students taking "a-f" courses. Individual projects showing increases ranging from +0.7 percent up to +22.2 percent. Two projects showed a decrease, one remained the same; and two junior high school projects did not provide this information.

By 1986-87, 12 projects increased the enrollment of their students in "a-f" courses over 1985-86, while two remained the same and two decreased enrollment. This comparison is based on data reported from all but one of the projects which served high school students. The reasons for the decreases could not be determined.

Students taking college admissions examinations

A third measure of success for the CAPP projects is an increase in the number of students who elected to take the Scholastic Aptitude Test (SAT) or the Assessment of the American College Testing Program (ACT). In the 15 projects reporting comparable data for 1984-85 and 1985-86 the number of students taking the tests increased by 198 -- an increase of 4.9 percent, not adjusted for enrollment. Specifically, in 1984-85, 5,282 students in 53 schools took the SAT, with three projects not providing information. In 1985-86, 7,639 students in 71 schools took the SAT, while one project utilized the ACT Assessment, and one other project did not provide information.

Achievement test scores

Comparison of students' California Achievement Program (CAP) test scores before and during the CAPP projects provide some indication of the projects' impact, despite the fact that test scores have improved statewide for all students. Nineteen of the 20 projects reported twelfth-grade achievement test scores in reading, writing, and mathematics. The twen-

DISPLAY 4 Characteristics of Curriculum Development Projects

Project	Curriculum Area														
	Mathematics	Science	Social Studies	Language Arts	Creative Thinking	Writing	Inservice	Tutorial	Testing	Guidance	Articulation	Curriculum Development	Seminars	Team Teaching	Field Trips
1 Fillmore	•	•					•		•		•	•	•	•	
2 Bakersfield Area	•	•					•	•	•	•	•	•	•		•
3 Sacramento State				•	•		•	•	•	•		•	•	•	•
4 Northridge					•		•	•			•	•	•	•	•
5 Sonoma			•									•	•	•	
6 Sacramento City						•	•		•	•	•	•	•	•	•
7 Irvine/Santa Ana	•	•			•	•	•	•	•	•	•	•	•	•	•
8 Watsonville	•	•	•	•			•	•		•	•	•	•		•
9 Montebello				•	•		•		•	•	•	•	•		•
10 San Diego	•	•			•		•	•	•		•	•		•	•
11 Santa Barbara	•			•				•	•	•	•	•			•
12 Davis Area	•				•		•		•			•	•		•
13 Wilmington	•	•		•			•	•	•	•	•	•	•		•
14 Irvine/ABC/Cerritos	•			•			•	•	•	•	•	•	•	•	•
15 Whittier	•						•	•	•	•	•	•	•		•
16 Lawndale				•			•	•	•	•		•		•	•
17 Chula Vista	•			•			•	•			•	•	•		•
19 Vacaville		•	•	•	•		•	•	•		•	•	•	•	•
20 Stockton	•	•	•	•			•	•	•	•	•	•	•	•	•

Note. Project 18 in Hayward was not able to implement its proposed activities during the first year, and its funding was terminated.

Source California Postsecondary Education Commission.

DISPLAY 5 Range of Students Served Between 1984 and 1987

Under 500 Students	500 to 999 Students	1,000 to 1,999 Students	2,000 to 3,000 Students	Over 3,000 Students
9 Montebello	2. Bakersfield	12 Davis	4 Northridge	1 Fillmore
14. Irvine /ABC	3. Sacramento State	15 Whittier	13 Wilmington	6 Sacramento City
	5. Sonoma	16 Lawndale	20 Stockton	7 Irvine/Santa Ana
	10. San Diego			8 Watsonville
	11. Santa Barbara			17 Chula Vista
	19 Vacaville			

Source Galligani, 1987.

DISPLAY 6 Non-White Graduates as a Percent of Total Graduating Class, 1984 and 1985

<u>Project</u>	<u>1984 Graduates</u>	<u>Percent of Class</u>	<u>1985 Graduates</u>	<u>Percent of Class</u>	<u>Comments</u>
1 Fillmore	122	55.7%	91	56.5%	
3 Sacramento State	203	74.1	169	66.5	
4 Northridge	155	35.9	230	52.4	
6. Sacramento City	1,108	58.0	1,121	58.0	
7 Irvine/Santa Ana	816	75.0	853	77.0	
8. Watsonville	225	60.0	240	65.0	
9. Montebello	420	86.9	387	87.3	
11 Santa Barbara	59	14.2	92	23.3	Partial data (one high school)
13. Wilmington	595	89.4	514	89.9	
16 Lawndale	191	52.3	292	68.1	
17 Chula Vista	1,060	55.0	1,386	66.0	
20 Stockton	N/A	N/A	575	72.0	Not available for 1984
Statewide average, public high school graduates		37.8%		38.4%	

Note: Data on the number of graduates as reported in *University of California Early Outreach Program, January 1987*. Three of the 20 projects involved junior high schools and are, therefore, not included here.

Source: Galligan, 1987.

tieth was a junior high school project. Among the 35 schools in the 19 projects, improvements were registered by 29 in reading, 26 in writing, and 28 in mathematics – for a total of 83 improved scores across the three areas out of a possible total of 105

Postsecondary enrollment

Another goal of CAPP was to increase the number of underrepresented students who participated in the projects and then actually enrolled in postsecondary institutions. The project evaluations focused on the University of California and the California State University, although Community Colleges and independent institutions actively participated in individual projects. The evaluation of this goal is limited by (1) the short time the projects have been in existence, and (2) the lack of follow-up studies conducted by the projects, but Display 7 on page 14 shows the postsecondary enrollment data for 10 of the 16 projects that provided services to high school students

In eight of the ten projects, the number of pupils enrolling at the University of California or the California State University increased. As a percentage of the graduates, six projects showed a positive percentage increase, while four showed a decrease when comparing 1984-85 to 1985-86

Postsecondary retention

Although the projects requested information from their student participants on their academic progress after one year at the University of California and the California State University, the resulting data were not consistent. Some projects provided information for 1983-84 and 1984-85, while other projects provided it for 1985-86 and 1986-87. Moreover, the available data are not clear about whether the students included in the statistics actually participated in project activities. Despite these limitations, 14 projects demonstrated an increase in student retention; four projects showed a decrease, and one project showed no change

DISPLAY 7 District Students Enrolled at the University of California or the California State University, 1984 and 1985

Project	1984			1985			Percentage Point Difference 1984-1985
	Graduates	Enrollment UC or CSU	Percent of Graduates Enrolling	Graduates	Enrollment UC or CSU	Percent of Graduates Enrolling	
1 Fillmore	122	1	0.01%	91	8	7.8%	+7.79
3 Sacramento State	203	25	12.3	169	27	15.9	+3.6
4 Northridge	155	45	29.0	230	56	24.3	-4.7
6 Sacramento City	1,108	225	20.3	1,121	214	19.9	-0.4
7 Irvine/Santa Ana	816	115	14.0	853	122	14.3	+0.3
8 Watsonville	225	6	2.6	240	13	5.4	+2.8
9 Montebello	420	55	13.0	387	56	14.2	+1.2
13 Wilmington	595	74	12.4	514	102	19.8	+7.4
16 Lawndale	191	27	14.1	292	24	8.2	-5.9
17 Chula Vista	1,060	209	19.7	1,386	231	16.6	-3.1
Statewide average for recent high school graduates			16.6%				17.7%

Source: Galligan, 1987.

Dropouts

Although the Commission requested drop-out information as part of the baseline data for its evaluation of the curriculum development projects, it is unable to draw substantial conclusions from the information provided, due largely to three factors:

1. Base-year drop-out data for 1984-85 were not available,
2. Other funding besides CAPP was allocated for dropout prevention, making it impossible to identify the impact of CAPP; and,
3. Most students in the CAPP projects do not represent potential dropouts, since potential dropout students would not normally take college admission tests, complete the requirements of the University of California, or enroll in college.

Teacher participation

An essential part of the CAPP projects is the interac-

tion of school teachers and administrators with university faculty members. According to information provided by the 20 projects, a total of 1,493 teachers and faculty participated, with their participation ranging from continuing direct involvement to one-time attendance at an inservice activity. Display 8 on the opposite page shows the number of projects involving different levels of participation. It should be remembered that some of the projects involving small numbers of faculty and teachers emphasized student participation, while others emphasized teacher and faculty involvement.

Local objectives

An important part of each CAPP project is the locally developed objectives related to students, teachers, curriculum, and the partnership. The extent to which these local objectives are met, along with other evaluative data, help measure the individual project effectiveness. Although the Commission has tried to summarize the projects' accomplishment of

DISPLAY 8 *Range of Teachers Participating in the Curriculum Development Projects*

Number of Teacher Participants	Number of Projects	<u>Project Number</u>
1 - 25	Five	Projects 3, 9, 10, 11, and 15
26 - 50	Eight	Projects 8, 12, 13, 14, 17, 18, 19, and 20
51 - 75	None	No Projects
76 - 100	Two	Projects 1 and 2
101 - 200	Two	Projects 5 and 16
201 and over	Three	Projects 4, 6, and 7

Source: California Postsecondary Education Commission.

their local objectives, it has been unable to do so, primarily because most projects did not state their objectives in measurable terms, did not provide adequate information on outcomes, and did not have an evaluation design that allowed tracking of project success by individual objective. In several instances, projects also added and deleted objectives

Nonetheless, the Commission was able to pull from the individual project evaluations examples of their impact in achieving local objectives.

Impact on students

- In the Santa Barbara project, more than two-thirds of the ninth and tenth grade students were re-programmed into higher level, more advanced classes as a result of the work of the project/teacher liaisons.
- In the Bakersfield project, grade-point averages of participating students improved significantly. For example, math grades improved, on average, from C+ to a B average. Overall, student grade-point averages improved by approximately the same amount, as did the grades in English and science.
- In the Santa Ana project, district enrollments of Hispanic high school students in advanced math classes increased from less than 3 percent to nearly 20 percent in the three years of the project.

Impact on college preparatory courses

- In the Stockton project, the overall enrollments in college preparatory courses increased by 50 per-

cent at all three district high schools during the two years of the project.

- In the Watsonville project, the number of mathematics and science college preparatory sections in the high school nearly doubled over the course of the three years of the project.

Impact on teachers

- District administrators and curriculum specialists in the Bakersfield project observed the following direct effects on project teachers: more time was given to project students (who were mainly minorities), more awareness of students' needs was demonstrated, project activities and ideas were used in the classroom, and these junior high teachers showed greater awareness of the importance of high school mathematics in assuring students' admission and success at four-year colleges
- In 1986-87, 38 teachers in the Vacaville project were directly involved as CAPP team members, participating regularly in partnership workshops, observing and demonstrating lessons, and implementing new instructional techniques and content units in their own classes. All teachers completing a follow-up survey reported using the concepts, materials, and activities in their classrooms.

Impact on parents

- In the Santa Ana project, attendance rates at parent activities increased dramatically from 5 percent of project high school parents in 1985-86 to 25

percent in 1986-87. In the same period, participation of junior high parents increased from 6 percent to 50 percent.

Impact on the curriculum

- The "math-in-science" materials developed in the San Diego area project have become a permanent feature in the school curriculum and have been adopted in other eighth and ninth grade classes both within and outside the district
- A social studies teacher reported on the effect of using the critical thinking materials developed by the Vacaville project: "They seem to have enabled students to use critical thinking skills not only in social studies but practically all areas. They have enhanced communication between the students and me, and between their peers."

Impact on schools

- At the Fairfax School District, the superintendent stated that the project served as the vanguard to bring about academic achievement for the entire school. Increases in student test scores and student learning were fostered by the public recognition, exposure to college options, personal growth, motivation, study skills, self-confidence, group cohesion, and academic awareness developed by the program

Impact on the teaching profession

- The Montebello project was recognized by the National Council of Teachers of English as a "Center for Excellence." As such, it has received national recognition of its project-developed writing program.

Curriculum revision

One of the primary thrusts of CAPP is to promote cur-

riculum revision and change. A review of the evaluation reports indicates that all of the 20 projects (excluding the Hayward project) initiated curriculum revisions. In three of the projects, the revisions appeared to cover one-half year, while 16 involved full-year implementation.

Examples of impact on curriculum include the following:

- Increased hands-on activities, new curriculum guides, increased use of computers and a new shift from a conceptual focus to a problem solving focus.
- Production of an anthology and instructor's manual for teaching ethnic literature.
- Development and implementation of new units and courses in science and math
- Preparation of a manual of typical writing assignments and rubrics designed to elicit "academic writing."
- Development and pilot testing of two new mathematics courses, in four districts, one at the seventh and eighth grade levels and one in grades 10 through 12

Continuing activities

One of the legislative criteria for the curriculum development projects was the ability and/or commitment of the projects to continue the CAPP activities after the termination of funding. Although not an identifiable part of the evaluation data, the program director conducted a telephonic survey that showed a considerable number of CAPP activities were continuing. A summary of the information obtained is shown by individual projects in Display 9 on the opposite page, with 11 of the 19 projects reporting that the activities are being continued at the same or a greater extent than when CAPP funding was being provided, and only two projects reporting that all of the activities have been discontinued.

DISPLAY 9 Continuing Activities of CAPP Projects Funded from 1984 to 1987, as of January 1988

Project	Inservice	Tutorial	Testing	Guidance	Articulation	Curriculum Development	Seminars	Team Teaching	Field Trips	Teacher/Parent Liaison	Summer Program	Conferences	General Status
1 Fillmore	+		+		+	+	+	+		+		+	Continuing
2 Bakersfield Area	+	-	+	-	+	0	+		-	-	+	+	Continuing
3 Sacramento State	0	0	0	-	0	-	0	0	-	0	0		Discontinued
4 Northridge	-	0			-	-	-	0	+		0		*
5 Sonoma						-	-	-				0	*
6 Sacramento City	0	+	+	+	+	0	0	0	+	+	-		Continuing
7 Irvine/Santa Ana	+	+	+	+	+	+	+	+	+	+	+	+	Continuing
8 Watsonville	+	+		+	+	+	+		+		+		Continuing
9 Montebello	-		0	0	-	+	-		-				*
10 San Diego	0	+	+	+	+	-		+	0				Continuing
11 Santa Barbara		+	+	+	+	+			+	+	+		Continuing
12. Davis Area	-		0			+	-				0		*
13 Wilmington	-	+	+	+	+	-	-		+				Continuing
14 Irvine/ABC/Cerritos	-	0	-	-	-	0	0	0	0	-	-	-	*
15 Whittier	+	+	+	+	+	+	+	+				+	Continuing
16 Lawndale	0	0	0	0		0		0	0				Discontinued
17 Chula Vista	+	0			+	+	+		+				Continuing
19 Vacaville	-	0	0		0	-	-	0	0	0	0		*
20 Stockton	-	-	+	+	-	+	+	+	+				Continuing

Key: + Same or greater - Lesser. 0 Discontinued.

* Generally the project activities are still continuing, but at a consistently lower rate than when CAPP funding was being provided.

Note Project 18 in Hayward was not able to implement its proposed activities during the first year, and its funding was terminated.

Source. Telephone survey by Deborah Osen Hancock, January 1988.

3

Diagnostic Testing Projects

Criteria for selecting the projects

As noted in Part One, AB 2398 authorized CAPP's diagnostic testing projects in order to "establish a voluntary cooperative program for the academic assessment of secondary school students in the state." It directed the Chancellor of the California State University "to ensure that increased uses of assessment instruments assist in the following

- 1 Reducing the demand for remedial programs at the postsecondary level,
- 2 Analyzing student readiness for college-level work,
3. Identifying the academic needs of students for secondary school teachers and counselors, and
- 4 Encouraging and giving priority to schools with low participation in institutions of postsecondary education or with concentration of students from groups which are underrepresented in postsecondary education."

CAPP's Advisory Committee accepted for funding the three assessment projects recommended by the Joint Projects Committee of the University of California and the California State University, which had developed criteria for these projects prior to the establishment of CAPP. These projects were the Mathematics Diagnostic Testing Project, the High School Diagnostic Testing Program in Composition, and the Writing Exam for Eleventh Graders. A subcommittee comprised of CAPP Advisory Committee members and representatives of the Joint Projects Committee assumed primary responsibility for monitoring these projects.

Location and emphases of the projects

- Display 10 on page 20 shows the locations of the three projects. The Mathematics Diagnostic Testing Project has ten sites around the State, with

five each on University of California and California State University campuses

- The High School Diagnostic Testing Program in Composition was a cooperative program among the University of California, Davis, California State University, Sacramento, and 20 area high schools
- The Writing Exam for Eleventh Graders is a cooperative program among the University of California, Los Angeles, and California State University, Northridge, with 13 senior high schools located primarily in the Los Angeles Unified School District

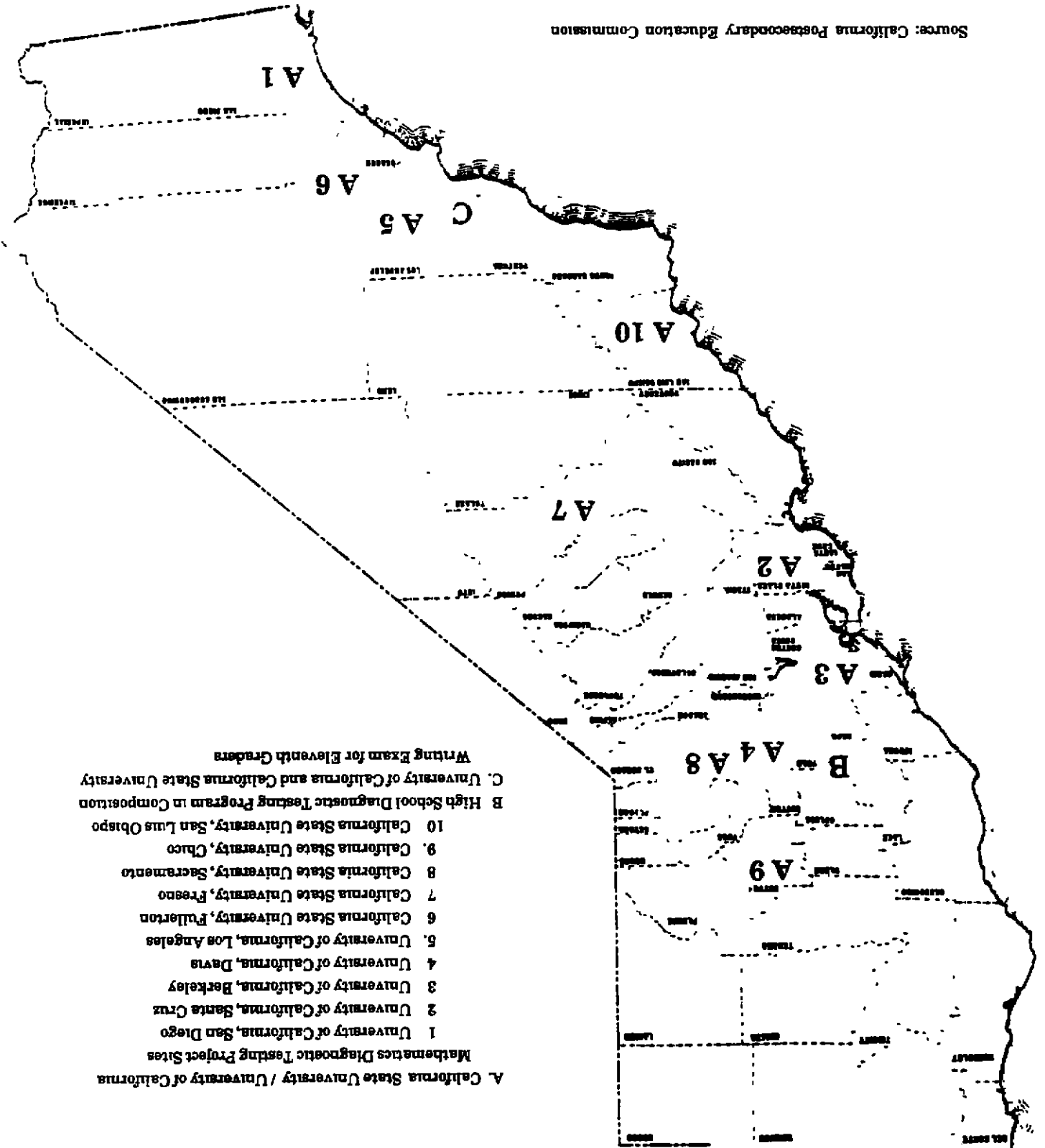
Mathematics diagnostic testing project

The Mathematics Diagnostic Testing Project began in 1977 as a joint project of the California State University and the University of California. Its initial purposes were to (1) determine mathematics competency areas necessary for student success in postsecondary calculus courses and (2) develop diagnostic tests to assess skills in those competency areas. A communication network with secondary schools was also established in order to provide information to mathematics teachers regarding their students' preparedness for college mathematics and science courses.

As the project evolved, the need for additional diagnostic tests was identified and interactions between project staff and secondary school mathematics teachers became more frequent and formal. Due to the growth of the secondary school component of the project after 1980, it became evident that the resources contributed by the California State University and the University of California would not be adequate to support both those activities, and the rapidly growing postsecondary component. CAPP has therefore provided funding for the school service activities of the project's secondary student assessment efforts since 1984, while the California State Univer-

DISPLAY 10 Geographic Distribution of CAP's Three Diagnostic Testing Projects

- A. California State University / University of California
Mathematics Diagnostic Testing Project Sites
- 1 University of California, San Diego
 - 2 University of California, Santa Cruz
 - 3 University of California, Berkeley
 - 4 University of California, Davis
 - 5 University of California, Los Angeles
 - 6 California State University, Fullerton
 - 7 California State University, Fresno
 - 8 California State University, Sacramento
 - 9 California State University, Chico
 - 10 California State University, San Luis Obispo
- B. High School Diagnostic Testing Program in Composition
- C. University of California and California State University
Writing Exam for Eleventh Graders



Source: California Postsecondary Education Commission

city and the University of California continue to support research and development activities related to secondary school testing

The current objectives of the project are to

- 1 Provide test materials and scoring services to all California mathematics teachers and schools who request them;

- 2 Continue development of an effective network of regional scoring sites that serve as resources to local schools and districts,

- 3 Provide information to 600 junior and senior high schools in 200 school districts on performance standards and curriculum expectations of the State University and the University of California in the area of mathematics,

- 4 Help high school counselors, students, and parents select appropriate high school mathematics courses based on the student's academic or career plans and mathematics competency, and

- 5 Encourage all students to get into the college preparatory track and stay in it until course work is successfully completed.

The project provides four tests and associated scoring services without charge to California high school teachers:

- A pre-calculus test that measures readiness for calculus,
- An intermediate algebra test measuring student readiness for mathematical functions and trigonometry courses,

- An elementary algebra test that measures skills essential for success in second-year algebra, and
- An algebra readiness test that reflects the State's new Mathematics Framework and Model Curriculum Standards and that is administered during the last course before first-year algebra, usually in junior high school.

Test development and validity studies have been ongoing for at least the past ten years. A mathematics faculty work group from the three public segments of California higher education are responsible for helping guide the project and make changes in these tests.

The project utilizes a computer-based scoring system

that is designed to give information to both the teacher and the student as to the level of competence achieved in the various topic areas covered by the examination

- All teachers receive topic-by-topic scores for each student in their classes together with class averages for each topic. A mastery level score for each topic is provided to enable the teacher to ascertain which of the topics have been successfully mastered by the students and which have not. In addition, a summary of the classes' responses to each test item is made available so the teacher can know which ideas and skills present difficulties for the class

- All students receive individual reports showing a topic-by-topic breakdown of their performance on the examination. Based on a comparison with the mastery level score, each student is given an indication as to the level of review necessary in each topic before mastery is achieved. This information serves as a guide to both the student and the teacher regarding the topics or sub-topics that should be emphasized during the remainder of the course, the topics the student should review outside the class before beginning further study, and which mathematics classes are appropriate for the student to take during the next school term

The project is in the process of implementing a longitudinal study that will focus on three questions

1. Do students whose mathematics teachers have used project tests show evidence of improved skills and better preparation for college?

- 2 Are there indications that teachers participating in the project are modifying the subject matter emphasis in their classes over time as a consequence of their participation?
- 3 Do students of various identifiable backgrounds such as socioeconomic status, ethnicity, gender, mathematics ability, and prior preparation receive comparable benefits from program participation?

High school diagnostic testing program in composition

The High School Diagnostic Program in Composi-

tion was a cooperative venture among the University of California, Davis, and the California State University, Sacramento, and 20 high schools to work with eleventh-grade students and English teachers in achieving these goals

1 To inform high school students about university composition standards and expectations, and, by use of a diagnostic examination with the university instructor responses, help these students identify academic skills they need to improve and offer them intensive instruction in revision as a means of improving their writing skills, and

2 To inform teachers of university expectations, standards, and examination formats, assist them in identifying the academic needs of their students and of needed curricular adjustments; and help them explore specific classroom strategies for improving students' writing skills.

In 1984, the project tested 621 students in 15 high schools. During 1985-86, it worked with 62 eleventh-grade English teachers in 20 high schools, received and graded essays from 789 students at 19 high schools, and conducted a teacher inservice workshop for 41 teachers who were divided into two groups, one at the University of California, Davis, and the other at California State University, Sacramento, in order to maintain a small-group size and accommodate differences in the teachers' geographic location. Forty-nine students attended a special one-day student workshop in which participants who had previously written essays as part of the project were taught strategies for revising essays and then devised plans for revising their own essays. In 1985, the project worked with 25 eleventh-grade English teachers in 20 senior high schools and received and scored essays for 951 students

The project did not collect student ethnicity data during its first two years, but in 1985-86, the State Department of Education's High School Performance Report Summary indicated that 39 percent of the eleventh grade students in the participating schools were minority students, as were 37 percent in 1986-87

Writing exam for eleventh graders

The Writing Exam for Eleventh Graders project of

the University of California, Los Angeles, and the California State University, Northridge, originated as a small Subject A outreach program begun by the University of California, Los Angeles, in 1980. After taking the Subject A exam there, some 90 high school students received scores and explanatory comments written by the faculty of the University of California, Los Angeles. In 1982, the program began involving high school teachers in the evaluation of their students' work, both in scoring their papers and in writing comments to elicit revision. Between 1982 and 1984, evaluation workshops were conducted so that students could receive their work and revise it while still in their eleventh-grade classes. In 1984-85, California State University, Northridge, became a partner. Their program was funded by CAPP in 1985 and funded for 1987-88 as a dissemination project

As in the other writing project, a major goal of this project is to teach students to revise their written text. Students are asked to write two essays -- a two-hour text-based essay and a one-hour personal essay. Both exams are scored and a reader comment is given only on the text-based essay. Where this project differs from the other is in the training of high school teachers to evaluate student essays holistically and the use of techniques for eliciting revision

In 1985-86, the project worked with 32 eleventh-grade English teachers in 17 area high schools, primarily in the Los Angeles Unified School District, and tested a total of 522 students. Eleven lecturers from the two universities participated in the project. During 1986-87, the project worked with 31 eleventh-grade English teachers from 13 high schools, and it tested 472 students. Seven university writing faculty were involved in the project, including three as project administrators

A new English as a Second Language (ESL) pilot-research component was added to the project in 1986-87 and drew 116 Level IV ESL students from five schools. The ESL teachers attended five more inservice sessions than did the other teachers. Those sessions involved a review of existing research on teaching language-minority students writing skills, identifying writing prompts, providing students with writing practice, and special classroom visits by university writing faculty. The ESL students in that (1) they differed from the other students in that (1) they wrote only the two-hour text-based essay, (2) they were given the text two days in advance of the writing

- The number of university test sites increased from five to ten during that time.
 - Interest and involvement of the State's Community Colleges in the project has been established
 - Analyses of student enrollment and performance data at 16 high schools that used project tests during the past three years showed increases in both the number of students taking three or more years of mathematics and obtaining average SAT or ACT scores
 - Pre-test and post-test analyses of data from one urban school district showed no discrepancies in the tests' predictive ability between the sexes and across ethnic groups.
- High school diagnostic testing program in composition*
- The project reached a proportionate number of minorities in the participating schools
 - Students improved their writing skills by participating in the project
 - Three-fourths of the participating teachers reported making teaching or curricular changes
 - Although an increased number of students were served in 1986-87, only 84 percent of the anticipated 1,600 were served
- Writing exam for eleventh graders*
- The project had significant minority participation, in that two-thirds of the students were ethnic minority
 - Teachers reported making changes in curriculum or teaching methods as a result of participation
 - Students writing skills have improved, and many will not need remedial writing courses
 - The ESL component has had a significant impact on students and teachers
 - Teachers who participated in the program rated all aspects of the program at 4 or above on a five-point scale

ting examination and participated in group discussions of its content to assure that they understood the passage, and (3) they did not receive an essay score although they did receive reader comments

Partly as a result of having a special component focused on ESL students, the minority representation among participating students rose to 75 percent in 1986-87, compared to 62 percent in 1985-86

Teachers provided ethnic data on 83 percent of the participating students in 1985-86 as follows: white, 38.4 percent, Hispanic, 25.2 percent, Asian/Pacific Islander, 3.7 percent. Almost two-thirds of the participants for whom ethnic data was available were from minority backgrounds.

Project funding

Funding for the diagnostic testing projects between 1984 and 1987 is listed in Display 1 on page 6 of this report. For the 1987-90 cycle, funding is limited to the UCLA/CSU-Northridge writing project for dissemination and continuation of the Mathematics Diagnostic Testing Project.

Project evaluation

One of the positive aspects of the State University's evaluation of the diagnostic testing projects is that one individual conducted the final evaluations for all three projects in 1986-87. Even though a common format was not used, data can be isolated and conclusions drawn. In addition, because two of the three projects were extensions of projects implemented and funded prior to CAP, longer comparisons can be drawn from them

Findings for the three projects are summarized below

Mathematics diagnostic testing project

- The number of tests scored increased 257 percent during the initial three years of CAP funding from 73,335 to 261,815

Conclusions

- 3 Effective school and college partnerships are characterized by several important elements, which were described on pages 6 and 7 of this report. The evaluation of the 20 curriculum development projects validates the importance of these elements and illustrates the particular importance of (1) mutual trust and respect among faculty and (2) the quality of the individuals, both in administrative and teaching roles, who have primary responsibility for development of the partnership roles.
- 4 While the operation of CAPF has included extensive evaluation activities, these activities have not resulted in the information necessary for drawing conclusive statements about the impact of the program in improving the preparation of students for college. The Chancellor's Office of the California State University and the CAPF advisory committee have reached the same conclusion and have devised an evaluation plan for the 1987-90 projects that will be more outcome oriented.
- 5 The direct involvement and commitment of the program advisory committee and the statewide liaison representatives have been essential to the development and implementation of the projects.
- 6 Despite some initial difficulties, the administration of the program by the Office of the Chancellor of the California State University appears satisfactory.

Diagnostic testing projects

- 7 The Mathematics Diagnostic Testing Project has demonstrated considerable success, experiencing increasing demand from mathematics teachers and secondary schools from throughout the State, and utilizing a growing share of the resources of CAPF.

THE goal of the California Academic Partnership Program is to "develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college." While these cooperative efforts did occur, definitive conclusions about the success of CAPF in improving the college preparation of all of California's public school students are difficult to make at this time because of (1) the inability to isolate the impact of activities provided by CAPF from that of other educational reform efforts occurring simultaneously in the State's secondary schools, and (2) incomplete data gathered by one of the evaluators retained by the California State University on some critical aspects concerning the operations of the program.

Based on the available data about the several projects and the program as a whole during the period from Fall 1984 to Summer 1987, the Commission offers the following eight conclusions concerning the operation and impact of the program during those years.

Curriculum development projects

- 1 The 20 curriculum development projects have a mixed record of success in achieving their objectives, with some of the projects clearly outstanding, some effective, and several ineffective. The successful projects had a positive impact on students in increasing postsecondary enrollments and improving preparation for baccalaureate work.

- 2 CAPF has stimulated meaningful school and college partnerships involving the University of California, the California State University, the California Community Colleges, and independent colleges and universities in the areas of curriculum development and teacher in-service training. Replication of these partnerships in other regions of the State would be beneficial.

8. The two diagnostic testing instruments developed in composition and writing, although effective,

do not appear to be usable statewide because of their high cost.

5

Recommendations

BASED upon the analysis and conclusions presented above, the California Postsecondary Education Commission offers the following recommendations regarding the future of the California Academic Partnership Program:

1. The California Academic Partnership Program should be continued and current funding levels maintained, with appropriate cost-of-living adjustments, pending a second comprehensive program evaluation by January 1991.
2. Annual reports should be required of each CAPP project and a comprehensive program evaluation should be conducted prior to January 1991, and every third year thereafter, by the Office of the Chancellor of the California State University. The report of this comprehensive evaluation should be submitted to the Legislature, the Governor, and the Postsecondary Education Commission, and the Commission should review and comment on these evaluations as appropriate.
3. The design for the comprehensive program evaluation should be jointly developed by the California State University, the California Postsecondary Education Commission, and the CAPP advisory committee. The evaluation should be outcome oriented and should include a follow-up study to determine the ongoing impact of CAPP on students, teachers, and the curriculum.
4. The present administration of CAPP by the California State University as an intersegmental program should be continued.
5. The Mathematics Diagnostic Testing Project should be funded by the Legislature and Governor for implementation on a statewide basis with test materials and scoring services available to all California mathematics teachers in secondary schools and Community Colleges who request them. Staff of the State University's Office of the Chancellor should work with the Intersegmental Budget Committee to develop and submit to the Department of Finance budget requests for the Mathematics Diagnostic Testing Project as well as the California Academic Partnership Program for inclusion in the 1989-90 budget.
6. CAPP project staff and participants should be encouraged, supported, and expected to make presentations at appropriate curriculum and professional workshops and conferences for both schools and colleges, in order to disseminate project information on intersegmental approaches to enhance the preparation of secondary school students for college.

Appendix A

Assembly Bill 2398 (1984)

Assembly Bill No. 2398

CHAPTER 620

An act to amend Sections 11000, 11001, 11002, 11003, 11004, and 11005 of the Education Code, relating to schools, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor August 14, 1984. Filed with
Secretary of State August 15, 1984.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2398, Hughes. California Academic Partnership Program.

Existing law authorizes the establishment of the California Academic Partnership Program, to be administered by the Trustees of the California State University for the purpose of providing academic and counseling services to pupils enrolled in grades 7 to 12, inclusive, and to increase the involvement of postsecondary educational institutions to improve the academic quality of public postsecondary schools. Existing law prescribes procedures for the establishment of an advisory committee for the purpose of making recommendations to the Chancellor of the California State University for the award of grants to projects submitted by qualified applicants in accordance with prescribed criteria to implement these provisions of existing law.

This bill would make substantial revisions to the provisions of existing law governing the administration of the California Academic Partnership Program.

This bill would require the program to be administered by the Trustees of the California State University, in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the Superintendent of Public Instruction. This bill would state that the purpose of the program is to develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college. This bill would specify that projects funded under the provisions of this bill may address improvements in secondary school curriculum and the ability of students to benefit from these improvements.

This bill would revise the provisions of existing law governing the composition of the advisory committee appointed to assist in the selection of proposals to be funded and the development of criteria for project evaluation, as prescribed. This bill would require the advisory committee to make recommendations regarding the development of criteria for identifying projects which are ineffective, and for the development of options identifying additional resources and efforts which promote the objectives of the program.

This bill would substantially revise eligibility criteria for the submission of funding for a project grant, as prescribed. This bill would require each project receiving a grant to provide matching funds, rather than an equal dollar amount of matching funds, from existing funds received from federal, state, local, or private sources. This bill would revise the priorities for the award of project grants.

This bill would require the Chancellor of the California State University, with the assistance of the advisory committee, and the advice of faculty from appropriate disciplines, to establish a voluntary cooperative program for the academic assessment of secondary school students in the state, as prescribed.

This bill would require the California Postsecondary Education Commission to provide a progress report on the effectiveness of the California Academic Partnership Program to the Legislature on or before January 1, 1988, and would require the commission to submit a final evaluation on or before January 1, 1988, as prescribed, and would authorize the commission to identify projects which are ineffective or not cost-effective for termination.

This bill would take effect immediately as an urgency statute.

The people of the State of California do enact as follows:

SECTION 1. Section 11000 of the Education Code is amended to read:

11000. There is hereby established the California Academic Partnership Program, to be administered by the Trustees of the California State University, in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the Superintendent of Public Instruction. The purpose of the program shall be to develop cooperative efforts to improve the academic quality of public secondary schools with the objective of improving the preparation of all students for college. Projects funded under the provisions of this chapter may address improvements in secondary school curriculum and the ability of students to benefit from these improvements. Academic partnership projects shall be distributed throughout the state in order to provide schools located in rural, urban, and suburban areas with access to these services.

SEC. 2. Section 11001 of the Education Code is amended to read:

11001. The Chancellor of the California State University shall establish an advisory committee to assist in selecting proposals to be funded and developing criteria for project evaluation. The committee shall be composed of the following members:

(a) Two certificated secondary school teachers, including at least one junior high or intermediate school teacher, appointed by the Superintendent of Public Instruction

(b) Two certificated secondary school employees with responsibility for curriculum administration, appointed by the

Superintendent of Public Instruction.

(c) One director of a regional consortium participating in the California Student Opportunity Access Program established pursuant to Chapter 113 of the Statutes of 1978, appointed by the Student Aid Commission.

(d) Two representatives of the California Community Colleges, to be appointed by the Chancellor of the California Community Colleges, at least one of whom shall be a faculty member.

(e) Two representatives of the California State University, to be appointed by the Chancellor of the California State University, at least one of whom shall be a faculty member.

(f) Two representatives of the University of California, appointed by the President of the University of California, at least one of which shall be a faculty member.

(g) One representative, appointed by the Director of the California Postsecondary Education Commission.

- Faculty appointments to the advisory committee shall be made by the appropriate appointing authority through consultation with the faculty senate.

SEC. 3. Section 11002 of the Education Code is amended to read: 11002. The advisory committee shall make recommendations regarding all of the following:

(a) Development of criteria for awarding grants pursuant to Section 11003.

(b) Development of criteria for determining the priority ranking of schools selected to receive assistance under the California Academic Partnership Program.

(c) Development of criteria for identifying projects which are ineffective.

(d) Development of options identifying additional resources and efforts which promote the objectives of the program.

(e) Development of a general policy for cooperative diagnostic testing of secondary students with assessment instruments commonly used by California postsecondary educational institutions.

SEC. 4. Section 11003 of the Education Code is amended to read:

11003. (a) A school district together with a postsecondary educational institution or a consortium of postsecondary educational institutions may submit a joint application to the Chancellor of the California State University for a grant to fund a project intended to improve student performance in secondary schools. The advisory committee shall give consideration to the following, in addition to its own criteria for the recommendation of programs for funding:

(1) The inclusion of a comprehensive plan for curricular revision or enhancement and instructional change.

(2) The participation of postsecondary campus faculty working as equal partners with secondary school teachers in efforts to improve the academic quality of college preparatory instruction.

(3) The provision of activities and services designed to enhance

the ability of students to benefit from college preparatory curricula.

(4) The provision of in-service training designed to increase college aspirations of students from groups with low participation rates in postsecondary institutions.

(5) The inclusion of procedures for the independent evaluation of the program budget.

(6) Plans for the participation of more than one secondary school.

(7) Plans for the inclusion of intermediate or junior high schools in the project.

(8) Plans for the continuation of the project after funding ceases.

(b) Upon receipt of an application submitted pursuant to subdivision (a), the Chancellor of the California State University may award a grant to the joint applicants for purposes of funding the proposed project. Each project which receives a grant pursuant to this subdivision shall provide matching funds from existing funds received from federal, state, local, or private sources or budget increases in those funds, with preference to projects which have the strongest demonstrated institutional commitment. Priority shall be given to projects which serve either of the following:

(1) Schools and school districts utilizing the provisions of Article 4 (commencing with Section 54700) of Chapter 9 of Part 29.

(2) Schools with low student participation in institutions of postsecondary education or with a concentration of students from groups which are underrepresented in postsecondary education, affording priority to those applicants in inverse order of their level of student participation in institutions of postsecondary education authorized to award baccalaureate degrees.

(c) The Chancellor of the California State University, with the assistance of the advisory committee established under Section 11001, and with the advice of faculty from appropriate disciplines, shall establish a voluntary cooperative program for the academic assessment of secondary school students in the state. In developing this system, the chancellor shall take steps necessary to ensure that increased uses of assessment instruments assist in all of the following:

(1) Reducing the demand for remedial programs at the postsecondary level.

(2) Analyzing student readiness for college-level work.

(3) Identifying the academic needs of students for secondary school teachers and counselors.

(4) Encourage and give priority to schools identified in paragraph (2) of subdivision (b) of Section 11003 for the utilization of these instruments.

SEC. 5. Section 11004 of the Education Code is amended to read:

11004 The California Postsecondary Education Commission shall provide a progress report on the California Academic Partnership Program to the Legislature on or before January 1, 1986, and a final evaluation report on or before January 1, 1988. The evaluation shall include, but need not be limited to, indicators of increases in the

number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the effectiveness of the program by participating school districts and postsecondary institutions, together with recommendations from the commission for the improvement of the program.

SEC. 6. Section 11005 of the Education Code is amended to read:

11005. Based upon evaluations conducted pursuant to Section 11004, the California Postsecondary Education Commission may identify projects which are ineffective or not cost-effective for termination. Funds made available as a result of that termination shall be reallocated for the awarding of new grants pursuant to Section 11003.

SEC. 7. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to ensure that the selection processes and criteria prescribed in this act will be implemented for the California Academic Partnership Program for the 1984-85 school year, it is necessary that this act take effect immediately.

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Appendix B

Project Descriptions

CURRICULUM DEVELOPMENT PROJECTS FUNDED IN 1984-1987

1. FIVE STAR ACADEMIC PARTNERSHIP

Project partners

Fillmore Unified School District
Norwalk-La Mirada Unified School District
University of California, Los Angeles
University of California, Santa Barbara

This project of the Fillmore Unified and the Norwalk-La Mirada Unified School District, in cooperation with the University of California campuses at Santa Barbara and Los Angeles, addresses two audiences -- underrepresented students in grades six through twelve, and teachers of mathematics and science. The project focuses on curriculum development and change in these two areas by (1) giving teachers opportunities to learn more about the content areas and (2) giving teachers opportunities to explore interactive instructional and learning methods.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$41,000 in matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$43,000 from CAPP and \$76,000 in matching funds. Funding for the 1985-1987 fiscal year was \$34,400 from CAPP funds and \$82,000 matching funds.

Curriculum areas: Mathematics and science; with an emphasis on how teachers view their own instructional role in these curricular areas; the nature of student teacher interactions; and illustrations of how scientists and mathematicians think.

Direct participants: Teachers on a voluntary basis, as follows:

Fillmore: 20-25 junior and senior high school mathematics and the same number of science teachers, plus four administrators.

Norwalk-La Mirada: 30 high school mathematics and 30 science teachers.

University of California, Los Angeles: one biology professor as a consultant.

University of Santa Barbara: one mathematics professor as a consultant.

Grade levels: Fillmore: sixth through twelfth grades; Norwalk-La Mirada: seventh through twelfth grades. Both districts have included, at district expense, teachers from grades K-5/6 who wished to participate in the project activities, including the voluntary Math and Science Support Groups.

Primary methods: Monthly one-day or half-day Math and Science Support Group meetings during the school year to discuss instructional techniques and to plan future inservice activities, with a culminating five-day summer inservice institute-retreat during both the first and second project years. In addition, the science teachers held a mid-year weekend institute-retreat at the UCLA campus during the second project year. The mathematics teachers held an early-summer curriculum development workshop between the first and second project years. During the third project year, a joint Math/Science three-day summer institute/retreat was held to help teachers integrate their math and science curricula and instructional activities. Students in the twelfth grade have been identified for longitudinal follow-up in postsecondary education.

2. A JUNIOR MESA PROGRAM FOR RURAL AND METROPOLITAN STUDENTS

California State College, Bakersfield
Arvin Union Elementary School District
Bakersfield City Elementary School District
Bakersfield College
Earliment Elementary School District
Fairfax Elementary School District
Kern High School District

This Kern and Tulare Counties partnership project is a modified version of the successful MESA senior high school program. It targets students for special services, such as tutoring and counseling, in order to improve their academic performance in science and mathematics courses.

Funding: Funding for the first six months of 1985 included \$31,996 from CAPP and \$60,000 matching funds from the districts and institutions. Funding for the 1985-86 fiscal year included \$70,000 from CAPP and \$220,000 in matching funds. Funding for the 1986-87 fiscal year was \$56,000 from CAPP funds and \$232,000 matching funds.

Curriculum areas: Mathematics, science, and English, with an emphasis on direct tutorial assistance including motivational counseling, study-skills development, and enrichment support for identified students.

Direct participation: Black, Hispanic, and American Indian students who meet the following criteria: (1) a standardized test score (CAT) of at least the 60 percentile or strong teacher

recommendation, (2) member of a targeted ethnic group (Black, Hispanic, American Indian, Puerto Rican), (3) Interest in math and science as determined from a student interest survey and, (4) a grade point average of at least 2.0 (C).

By the end of the 1985-86 school year, the project had enrolled 343 students from all 12 junior high and upper elementary schools in the seven districts. A one-week summer enrichment program attracted 68 students. A total of 64 students completed the program.

Grade levels: The project serves seventh and eighth graders who will feed directly into the existing MESA program (not funded by CAPP). This includes the Kern Union High School District and the Delano Joint Union School District.

Primary Methods: Academic tutoring, independent study groups, summer enrichment programs, counseling, field trips, awards, teacher training, curricular enhancement and parent involvement.

Other objectives: Identification of teams of four teacher/counselor advisors at each junior high school who receive support and inservice training. Tutors from colleges and high schools are selected and provided with training.

3. ETHNIC LITERATURE -- A MODEL FOR TEACHING CRITICAL THINKING SKILLS

Participants:

California State University, Sacramento
Grant Unified High School District

In this project of the Grant Union High School District and the California State University, Sacramento, ethnic literature serves as a curricular model for teaching critical thinking skills to students from two middle schools and the high school. Faculty from the district and the university jointly developed curriculum and testing instruments.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$37,000 matching funds from the districts and institutions. Funding for the 1985-86 fiscal year included \$53,375 from CAPP and \$69,000 in matching funds.

Curriculum areas: English, with an emphasis on "critical thinking skills."

Direct participants: About 150 students, primarily minority, were enrolled in the project classes during the 18 months of the project's life. Three teachers, one from each of the three project schools, participated in the project. A CAPP project class was

selected by the teachers from one of five classes they taught. Three university professors were regularly engaged in developing curriculum materials, giving students lessons, and working with the three classroom teachers. In addition to the three university faculty, seven other CSUS faculty members participated as inservice workshop presenters and lecturers to classes during campus visits. A majority of the participating project faculty were minority members themselves, representing both Black and Hispanic ethnic groups. A three-day invitational writing camp was conducted at CSUS in August 1985. Sixteen students were invited and 14 attended. The group was evenly split between males and females between minority and majority ethnic groups.

Grade levels: One gifted class, eighth grade-ninth grade combination; one ninth grade class, and one tenth grade class. Participants from the two middle schools feed into Grant High School.

Primary methods: Model lessons given by university faculty, compilation of curriculum materials to create instructional units, tutoring by high school peer mentors and university students, and summer writing camp.

Other objectives: Frequent planning and review meetings with representatives from the institutions (three teachers, school administrators, and California State University, Sacramento faculty members and EOP and outreach staff).

4. LANGUAGE ACROSS THE CURRICULUM: "LEARNING FROM TEXT"

Participants:

California State University, Northridge
Los Angeles Unified School District

The focus of this project of Cleveland Senior High School, Sutter Junior High School, and California State University, Northridge, is to improve the instruction of language across the curriculum through team teaching and the sharing of teaching methodology from university professors to high school teachers to college students.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$43,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$62,120 from CAPP and \$85,000 in matching funds. Funding for the 1986-1987 fiscal year was \$48,004 from CAPP funds and \$91,000 matching funds.

Curriculum areas: Reading comprehension and vocabulary skills through subject areas of social studies, English, science, mathematics, and English as a second language.

Direct participants: 16-20 teachers in 1985-1986 from each of the five curricular areas listed above. The project director reported

that approximately 540 students were served each semester in 1985, 185-925 Cleveland students and 410-1050 Sutter students in 1986.

Grade levels: Sixth through twelfth grades.

Primary methods: Three-day summer inservice workshop, periodic planning and follow-up meetings, and demonstration lessons by California State University, Northridge faculty.

Other objectives: Participating teachers became "master" teachers and helped train other teachers in the second and third years. The project sought to improve students' attitudes toward reading and provide them with realistic assessment of college options and prerequisites. It also produced numerous articles and presentations for professional educators, jointly presented by school-college faculty.

5. ACADEMIC PARTNERSHIP TO IMPROVE SOCIAL STUDIES CURRICULUM

Participants:

Sonoma State University
Cotati-Rohnert Park University School District

Jointly sponsored by the Cotati-Rohnert Park University School District and Sonoma State University, this project served as a pilot site for the development of new curriculum units that could be disseminated to small high schools (100-400 ADA) within the University's service area. The curriculum development was designed for special units of geography and economics in order to meet the requirements for social studies included in the Hughes-Hart Educational Reform Act of 1983 (SB 813): American History/Geography and American Government, Civics and Economics.

Funding: Funding for the 18-month project beginning in January 1985 and ending in June of 1986 included \$30,995 from CAPP, and \$8,000 from matching funds.

Curriculum areas: American history and geography; American government, civics, and economics. Emphasis on restructuring existing history and government courses by infusing units of geography and economics to match the state's curriculum standards.

Direct participants: Four classes of 12th grade American government, seven classes of 11th grade U.S. history, and one class of 9th grade world history for a total of 235 students. Participating students were "mixed, heterogeneous, and some college bound and some not." Three to four high school teachers and four to five university professors were involved in the project. During 1985-86, dissemination of project developed material was presented to various groups of teachers through (1) three workshops which included 50 high school teachers from 30 schools; (2) a three-day institute which drew 27 high school teachers from 19 schools, and

59 elementary teachers from 50 schools (representing all six counties in Sonoma State University's service area); and (3) lesson demonstrations at Stanford University which attracted 40 teachers from 10 counties in the state.

Grade levels: Ninth, eleventh, and twelfth grades.

Primary methods: Progressive development, presentation, and revision of instructional units through planning sessions of three-member teams of university faculty and secondary school teachers and pilot presentations by team members.

6. HIGH SCHOOL/COLLEGE PARTNERSHIP PRODUCES PREPARED STUDENTS

Participants:

Sacramento City College
Sacramento City Unified School District

The Sacramento Unified School District and Sacramento City College worked together with students in grades seven through twelve to increase their knowledge about and preparedness for college, using aptitude and placement testing, and intensive academic counseling for students and their parents. Secondary school teachers participate in an inservice training program on curriculum development.

Funding: Funding for the first six months of 1985 included \$20,000 from CAPP and \$96,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$50,285 from CAPP and \$195,000 in matching funds. Funding for the 1986-1987 fiscal year was \$40,025 from CAPP funds and \$212,000 matching funds.

Curriculum areas: English, mathematics, science, social science, and English as a second language (ESL).

Direct participants: During 1985-86, 1,500 middle school students were given half-day tours of the City College (80 students at a time throughout the year). Beginning in the summer of 1986, 56 middle school students who had toured the community college participated in a 4-233k summer program call the Early Start Program (ESP). Middle school counselors identified potential participants and sent them invitations. About 85% of the students are described as coming from AFDC families: 40% are Black, and 22% are Hispanic.

Grade levels: Seventh through twelfth.

Primary methods: One-day teacher inservice workshops, direct instruction to selected students on college admissions test-taking, planning meetings for teachers by content areas, and dissemination of the articulation council model.

Other objectives: Informational mailings to high school parents concerning college entrance and preparation; middle-school student tours of the Sacramento City College campus; inservice development of middle-school counselors; and internal and external publicity.

**7. PROJECT STEP - STUDENT/TEACHER EDUCATIONAL PARTNERSHIP:
A MODEL FOR INTERSEGMENTAL COOPERATION**

Participants:

University of California, Irvine
Santa Ana Unified School District
California State University, Fullerton
Rancho Santiago College
Chapman College

Through a services of forums and workshops on curriculum development, and inservice training for secondary school teachers and university faculty, this project focuses on teaching problem solving and higher order thinking skills across the curriculum. Tutorials are provided to students.

Funding: funding for the first six months of 1985 included \$37,450 from CAPP and \$27,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$71,487 from CAPP and \$50,000 in matching funds. Funding for the 1986-1987 fiscal year was \$60,766 from CAPP funds and \$50,000 matching funds.

Curriculum areas: Reading, writing, mathematics, and science, with an emphasis on teaching problem solving and higher-order thinking skills.

Direct participants: For 1985-1986, 680 students from the seven intermediate schools participated, and 1,561 students from three high schools participated in support services. Student selection is either through full class participation in a project teacher's classroom or, for individualized student activities (tutoring and special student programs), through self-selection or nomination by counselors and teachers. Thirty-five faculty members from the three postsecondary institutions also participated.

Grade levels: Grades 6-12.

Primary methods: Forums and workshops for curriculum development and inservice training, with student tutoring in mathematics and reading.

This project was selected as a Showcase Project for 1987-1990.

8. ACADEMIC PARTNERSHIP

Participants:

Pajaro Valley Unified School District
University of California, Santa Cruz

This project, conducted by the Pajaro Valley Unified School District and the University of California, Santa Cruz, is concentrated in one school -- Watsonville High School, which enrolls a large proportion of ethnic minority students (61% Hispanic enrollment). Services are also provided to three feeder junior high schools. This project is designed to motivate students to take and succeed in courses which will prepare them for a postsecondary education. In addition to improving the school's curriculum, the project sponsors inservice training for teachers, tutorial assistance for students, and a "Saturday Science and Mathematics Academy" for seventh- and eighth-grade students and a ten day Summer Science and Mathematics Academy for high school students.

Funding: Funding for the first six months of 1985 included \$32,000 from CAPP and \$59,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$49,145 from CAPP and \$113,000 in matching funds. Funding for the 1986-1987 fiscal year was \$40,000 from CAPP funds and \$114,000 matching funds.

Curriculum areas: Biology, marine science, earth science, physics, and mathematics.

Direct participants: (1) The Summer Science and Mathematics Academy has provided an excellent science opportunity for approximately 20 academically promising ninth and tenth grade students who have not yet enrolled in biology. Students are identified and nominated by teachers for this ten-day program at the University of California, Santa Cruz campus. In 1985, eight of the 18 students in the program had Spanish surnames and two had Asian surnames. As part of the Summer Science Academy, approximately 11-12 UCSC professors and scientists make presentations and work with the students. There are also two high school teachers who participate as mentors, one in science and the other in mathematics. (2) the Saturday Science and Mathematics Academy is for seventh and eighth grade students from Watsonville High School's three feeder junior high schools. Students visit the UC Santa Cruz campus for a day-long educational program conducted by university faculty and graduate students. (3) The Learning Assistance Program provides regular tutorial meetings for tenth, eleventh, and twelfth grade students enrolled in advanced mathematics and physical science courses. Students are referred to the program by either instructors, counselors, parents, or the university program supervisor.

Grade levels: Distinct activities for students in grades seven through twelve.

Primary methods: Direct instruction of students in academies and field trips related to the curriculum development. Also inservice programs for teachers.

Other objectives: Cross-age tutoring and counselor training.

This project was selected as a Showcase Project for 1987-1990.

9. PREPARING STUDENTS FOR UNIVERSITY-LEVEL ACADEMIC WRITING

Participants:

**Montebello Unified School District
University of California, Los Angeles**

This project targeted minority students in grades seven through eleven who have potential for success in college, but who have not necessarily been in a college-bound program. Project teachers participate in a staff development program which focuses on special writing instruction for targeted students. Students in the project had the opportunity to visit the University of California, Los Angeles campus, send their writing samples to the university for review and comment by faculty, and to take the UCLA Freshman Writing Exam while in eleventh grade. Teachers in the program also produced a textbook on writing entitled, Masters of Words. Makers of Meaning.

Funding: Funding for the first six months of 1985 included \$27,124 from CAPP and \$27,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$62,500 from CAPP and \$56,000 in matching funds. Funding for the 1986-1987 fiscal year was \$53,368 from CAPP funds and \$51,000 matching funds.

Curriculum areas: Writing, with an emphasis on critical thinking skills and clear written expression.

Grade levels: Seventh, ninth, and eleventh.

Primary methods: Teacher inservice development through bi-weekly and tri-weekly meetings.

Other objectives/methods: Counseling to enhance each student's self-image, raising of college awareness through presentations by UCLA personnel, and testing.

10. THE QUANTITATIVE EDUCATIONAL DEVELOPMENT PROJECT

Participants:

**San Diego City Schools
San Diego County Consortium**

This project works with three junior high schools -- two in the San Diego City Schools and one in the Cajon Valley Union School District. The three schools are composed predominantly of ethnic minority students. The purpose of the project was to strengthen the students' curriculum, the quality of instruction, and the students' motivation by offering three types of services to teachers and students: (1) integrating skill development through introduction of scientific facts and procedures, the materials and lesson plans to help teachers develop reading, writing, computation, and critical thinking skills while building the students' proficiency in science. (2) Providing new science teachers with University faculty and basic skills specialists to build their professional skills. The specialists also work with experienced teachers in order to help them apply and elaborate on innovative instructional methods; and, offering after-school tutoring and counseling to promising students who are having difficulty mastering science concepts and activities. The project also provides proficiency and aptitude measurements in order to contribute to the student's intellectual and emotional growth. In 1986-1987, the project developed a video for use in neighborhood meetings. The video will provide the foundation for discussion in those meetings. The meetings, which are direct to parents, are intended to provide parents with an understanding of both the challenges and rewards which college preparation offers. The project targets all eighth grade students.

Funding: Funding for the first six months of 1985 included \$34,676 from CAPP and \$32,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$40,243 from CAPP and \$63,000 in matching funds. Funding for the 1986-1987 fiscal year was \$37,850 from CAPP funds and \$75,000 matching funds.

Curriculum areas: Science, with attention to reading, writing, and computation skills within the context of the science curriculum.

Direct participants: Students and teachers: nine science teachers and approximately 1,000 eighth grade students; approximately 50 students in the after-school program. Nearly half the students at Keiller Middle School are Black (47%), 31.4% are White, 12.8% are Hispanic, 6.9% are Asian/Filipino, and 0.4% are American Indian. Five University of the Pacific professors are the main postsecondary participants. College students serve as tutors for the project.

Grade level: Eighth.

Primary methods: Demonstration lessons, team-teaching, curriculum development, and tutorial and skill-development assistance by university students.

Other objectives: Students are pre- and post-tested, and their progress is monitored through a series of mastery learning units in the Achievement Goals Program (AGP) developed by the district. Students who do not achieve mastery (defined as correctly answering

80% of the test items associated with each unit) leave their elective classes or supplemental activities and receive additional "reinforcement" instruction until they attain mastery.

11. LINKING RESOURCES FOR STUDENTS UNDERREPRESENTED IN HIGHER EDUCATION

Participants:

Santa Barbara High School District
University of California, Santa Barbara
Santa Barbara Community college

The LINK project targeted ethnic minority students in junior and senior high school who were identified as having "good academic potential." The students initially selected for the program were high potential sixth grade students who were invited to participate in a "head start" summer school. The summer school emphasized reading, writing, mathematics, keyboard/word processing, science, art, and selected enrichment activities, such as: library use, music, drama, and sports. The students received the support of a teacher/liaison during both junior and senior high school. For high school students in the program, a six-week preparation for college admissions testing was provided. The teacher/liaison monitored student progress, maintained contact with parents and teachers, and provided structured tutorial services for the students. There were also activities designed to prepare students, both academically and socially, for their transition from junior to senior high school. As part of the high school program, classes were offered which focused on preparing students for college admissions tests. Workshops and seminars were provided during the year to inform parents and students regarding the college admissions process.

Funding: Funding for the first six months of 1985 included \$20,000 from CAPP and \$28,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$37,452 from CAPP and \$33,000 in matching funds. Funding for the 1986-1987 fiscal year was \$33,703 from CAPP funds and \$33,000 matching funds.

Curriculum areas: Mathematics and language arts.

Direct participants: Students were identified by project staff on the basis of performance on district administered standardized tests and from recommendations from counselors and teachers. In 1985-86, 227 students were served by the project. There were 71 eighth grade students, 78 seventh grade students and 78 sixth grade students who participated in the 1986 summer session. The ethnic composition of those participants is: American Indian - 1%, Black - 4%, and Hispanic - 95%. For 1986-87, students (grades 7, 8, and 9) meeting the selection criteria included 84 from La Cumbre Junior High School, 86 from Santa Barbara Junior High School, and 46 from Santa Barbara High School. An additional 80 sixth grade

students were identified each spring. Twelve school district teachers directly participated in the program with approximately 45 additional teachers interacting with the teacher/liaisons. Seven UC Santa Barbara professors, staff and students, and four faculty from Santa Barbara Community College participated in the project.

Grade levels: Sixth, seventh, and eighth.

Primary methods: A liaison teacher works with and advises students and oversees paid tutors; home visits are conducted for parent involvement and teacher education; and, a four-week summer "head start" for junior high is offered to incoming seventh grade students with academic potential.

Other objectives/methods: Career awareness and value clarification study groups; research conducted by UCSB staff to assess parent/student knowledge of the college admissions process; on-going UCSB involvement in curriculum work and evaluation.

12. MATHEMATICS: NEW COURSES IN THE 9-12 ACADEMIC PREPARATION SEQUENCE

Participants:

University of California, Davis
California State University, Sacramento
San Juan Unified School District
Sacramento Unified School District
Grant Joint Unified School District
Elk Grove School District

This project focused on curriculum writing and the piloting of two new math courses, one at the seventh and eighth grade levels and the other at the twelfth grade level. The initial high school course was split in two; one course for those students who had completed geometry, and the other for those who had taken advanced algebra.

Funding: Funding for the first six months of 1985 included \$29,404 from CAPP and \$23,000 matching funds from districts and institutions. Funding for the 1985-1986 fiscal year included \$58,500 from CAPP and \$28,000 in matching funds. Funding for the 1986-1987 fiscal year was \$47,000 from CAPP funds and \$29,000 matching funds.

Curriculum areas: Mathematics and problem solving.

Direct participants: Forty-four teachers (of whom CAPP supports 27 and the district supports 17), with the CAPP teachers including ten from the San Juan Unified School District, eight from the Sacramento UNified School District, six from the Grant Unified School District, and three from the Elk Grove Unified School District. In 195-86, approximately 191 twelfth grade and 533

seventh-eighth grade students were in pilot classes taught by project teachers. Over 80% of the 12th grade students and 40% of the seventh-eighth grade students in pilot classes were from the San Juan Unified School District schools. Faculty members from the University of California, Davis, and the California State University, Sacramento, also participated.

Grade levels: Seventh, eighth, and twelfth.

Primary methods: Three to four all-day workshops, bi-monthly resource meetings, one- and two-week summer sessions of course writing, and classroom field testing in 1985-1986.

Other objectives/methods: Guest presentations by visiting mathematics experts.

13. ACADEMIC PARTNERSHIP TO IMPROVE COLLEGIATE PREPARATION

Participants:

University of California, Los Angeles
Los Angeles Unified School District
Los Angeles Harbor Community College

This project was designed to extend and update curriculum revision, provide for curriculum and counseling services with the junior high schools and Harbor College, and to provide other direct services to teachers and counselors in the form of workshops to students through counseling and tutorial services and diagnostic testing and placement assistance. The project identified several outcomes they expected to accomplish in meeting their goal of "clearing the obstacles that inhibit ready access to postsecondary education and to provide a flow of information among Banning High School, Harbor College, and UCLA." Those outcomes were: (1) Inter-institutional curricular continuity in mathematics, writing, and science as well as vertical and horizontal articulation of the curriculum within the secondary institutions. (2) Improved student performance in the target area. (3) Better understanding of the interactions between teaching practices, testing, and student performance. (4) Enhanced tutoring and counseling coordination among the institutions. (5) Development of a core curriculum/placement model. (6) Dissemination of information about the program as an inter-institutional curriculum continuity model.

Funding: Funding for the first six months of 1985 totaled \$20,000 from CAPP and \$24,000 in matching funds. Funding for the 1985-86 fiscal year included \$50,988 from CAPP and \$38,000 in matching funds. Funding for the 1986-87 fiscal year included \$40,765 from CAPP and \$40,000 in matching funds.

Curriculum areas: Mathematics, writing, and science, with a focus on inter-institutional curricular continuity in each area from high school to community college to university.

Direct participants: The total student population at Banning High School (2,800 students) and three junior high schools: Carnegie, Curtiss, and Wilmington (4,400 students) were essentially the target population. The main target population consisted of 200 magnet school students and 800 Banning High School students participating in the Core Curriculum program. These students were identified as having the potential for success in college.

Sixty-two teachers from the four secondary schools (23 English, 16 science, 14 math, and 9 social studies) out of 350 certified teacher were active in the project. In addition, 13 counselors and the librarian from Banning High School and 17 counselors from the three junior high schools also participated (8 from Wilmington, 5 from Curtiss, and 4 from Carnegie). The postsecondary component consisted of 6 faculty and 3 counselor/administrators from Harbor College, and 4 faculty and 2 administrators from UCLA.

Grade levels: Junior high school through twelfth grade:

Primary methods: Workshops, monthly counselors' colloquia, counseling and testing.

14. COLLEGE ASPIRATION PARTNERSHIP PROGRAM

Participants:

ABC Unified School District
University of California, Irvine
Cerritos College

The College Aspiration Partnership Program focused on the identification, academic preparation, and support of students from groups that are underrepresented in postsecondary education. Intersegmental team teaching was used to produce a "fully articulated curriculum" in mathematics and English. Students from underrepresented ethnic minority groups were targeted to receive peer counseling as well as tutoring to improve their potential to enroll and persist in postsecondary education.

Funding: Funding for the 1985-86 fiscal year included \$62,517 from CAPP and \$198,000 in matching funds. Funding for the 1986-87 fiscal year included \$50,014 from CAPP and \$198,000 in matching funds.

Curriculum areas: English and mathematics.

Direct participation: During the first year of the project (1985-86), there were 99 junior high and 283 high school students participating. In the second year, 118 junior high and 539 high school students participated in the project.

Students were identified through a computer search of grades 7-12. The computer search identified those students whose GPAs were

between 2.0 and 4.0 and were defined as "underrepresented" (Black, Hispanic, American Indian, or Asian).

Eleven teachers, one from each of the participating schools were involved in the project as "teacher-advisors." The "Articulation Faculty" for English included five other teachers from two of the junior high schools and three from the high schools. The "Math Articulation" team consisted of 10 teachers, eight from the high schools and two from the junior high schools. Seven tutors, all of whom had passed the district's instructional aides' examination, participated in the project.

Four English department faculty and two math department faculty from UC Irvine participated in the project as well as 15 program and student support directors and staff who contributed to the project. Two English department instructors and one math department instructor from Cerritos College participated in the project's articulation efforts.

Grade levels: Seventh through first year of college.

Primary methods: Student tutoring, parent conferences, guest speakers, workshops and study groups, counselor mini-conferences, celebrations, and field trips to university campuses. The project director's report noted that "the participating schools with the highest degree of success as measured by student attendance at CAPP meetings were those which: (1) the counselor contacted each student and the student's parent(s) by telephone. (2) The teacher-advisor established regular meeting times. (3) The counselor and teacher advisor reviewed with the students and their parent(s) the criteria for selection for participation in the project. (4) The teacher did a survey of college bound needs/preferred activities with the students and was able to begin implementing some of those activities.

The least successful were those CAPP groups that emphasized the tutorial aspects of the program without instilling in the student sense of being part of an elect group which other might want to emulate or join. Chartered CAPP clubs were organized with CAPP T-shirts, bonding exercises and student services and conference guidance (three separate conferences) all of which "served to create a good cohesiveness."

15. THE MATHEMATICS AWARENESS AND SKILL DEVELOPMENT PROGRAM

Participants:

South Coast EOPS Consortium
Whittier Unified High School District
California State Polytechnic University, Pomona
Rio Hondo Community College
Whittier College

This project targeted students enrolling in five pre-algebra and

algebra courses at Pioneer High School. These courses were identified as the critical preparatory courses that determine whether students can continue to take the sequence of math courses necessary for college. The courses are generally taken in the first two years of high school, enough time to help students while they are still in high school. The project actually served students enrolled in eight courses, including one section of calculus, three sections of introduction to algebra, three sections of algebra I, and one special class of students who failed or received Ds in the first semester of algebra I.

Funding: Funding for the 1985-86 fiscal year included \$40,000 from CAPP and \$140,000 in matching funds. Funding for the 1986-87 fiscal year included \$32,000 from CAPP and \$118,000 in matching funds.

Curriculum areas: Mathematics.

Direct participants: Pioneer High School (the main target site) has the largest proportion of Hispanic students (74%) and the smallest proportion of White Students (21%). The proportion of Hispanic students receiving tutoring in 1985-86 was 79%; Whites, 16%; and Asian/Filipino, 5%.

Four teachers taught eight courses and sections utilizing 11 student tutors; four from Whittier College, three from Rio Hondo Community College, one from Cal Poly, and the remainder from Pioneer High School. Two faculty members from Whittier College team taught the calculus class with one of the high school teachers. Sixteen other personnel are listed by the project as participants representing all of the partnership institutions. Most of the 16 members are part of the project's Academic Advisory Team which "has the responsibility of recommending and implementing curriculum development revision."

Grade levels: Ninth through twelfth grades.

Primary methods: The project utilizes the following methods to help the students and teachers involved in the project:

- (1) Tutorial/Instructional Aides, from schools represented by the partners, (to) assist high school teachers in class, tutor after school, and maintain a tutorial lab open one night per week.
- (2) An Academic Advisory Team composed of secondary and postsecondary faculty (to) review mathematics curriculum and teaching methodology.
- (3) Guest lecturers from colleges or universities (to) make presentations on subjects related to applications of math in settings which will stimulate students' interests and motivation for learning mathematics.
- (4) Inservice training activities to meet the specific needs of secondary math faculty.

16. THE COLLEGE PREPARATORY TUTORIAL CENTER PROJECT

Participants:

California State University, Dominguez Hills
Centinela Valley Unified School District
El Camino Community College

Students in this project were involved in computer-assisted instruction in mathematics and English before and after school. Students from the community college and high school project site (Leuzinger High School) provide additional tutorial assistance to project student participants.

Once the students reached the twelfth grade and had mastered basic skill objectives, they became eligible to participate in an internship program through Northrup Corporation. The internship program was seen as a way of exposing students to careers requiring a postsecondary education.

Funding: Funding for the 1985-86 fiscal year included \$44,756 from CAPP and \$48,000 in matching funds. Funding for the 1986-87 fiscal year included \$25,955 from CAPP and \$38,000 in matching funds.

Curriculum areas: Mathematics and English, utilizing a computer-assisted instructional (CAI) program. The CAI program consisted of PLATO's basic skills (Grades 3-8) and high school skills (grades 9-12) software; diagnostic tests tied to computer curriculum; and a central management system.

Direct participants: Seventy-five tenth grade Leuzinger students or 10% of the sophomore class were targeted to participate in the project. Students identified as those who were potential college candidates but were achieving slightly lower than their appropriate grade level were invited to apply for admission to the project. Since student participation was totally voluntary and extended outside the regular class schedule, participation rates were barely 40 students each semester. The project was expanded to other grades (9-12) in order to fully utilize the available equipment. The following chart provides the ethnic distribution of students participating in the project for 1985-86.

For the second year of the project (1986-87), the distribution of students included fewer Hispanics (30%) and more recent Asian arrivals and filipinos (45%). The percentage of Blacks and Whites remained relatively unchanged (10% each year).

Grade levels: Ninth through twelfth grades.

Primary methods: Students were identified and given pre- and post-tests using standardized math and language tests from the CTBS (Comprehensive Tests of Basic Skills) battery. Students would then utilize a computer assisted instructional program before and after school relying on the assistance of tutors from the community college and Leuzinger High School. Positive motivational

incentives were awarded on a weekly basis utilizing individual and corporate donations for gifts. Once a student reached the twelfth grade, he/she was eligible to participate in an internship program through Northrup Corporation.

17. COMPREHENSIVE MATH AND LANGUAGE ARTICULATION AND TUTORIAL CENTER PROGRAM

Participants:

Southwestern College
Sweetwater Unified High School District
San Diego State University

This project's goal was to establish a district-wide peer tutoring system using revised mathematics-related curricula developed collaboratively by secondary and postsecondary institutions during the first 12 months of the project. The second 12 months were devoted to replicating the same strategies for all language skill areas of the curriculum.

Funding: Funding for the 1985-86 fiscal year included \$57,661 from CAPP and \$76,000 in matching funds. Funding for the 1986-87 fiscal year included \$46,406 from CAPP and \$76,000 in matching funds.

Curriculum areas: Mathematics during the first year and language arts the second year.

Grade levels: Seventh through twelfth.

Primary methods: Workshops for staff, parents, and students were conducted to disseminate the products, refine articulation strategies, and provide general information on the goals of the project. Schools were selected to participate in the project using students' standardized test performance, population characteristics, and school-site administrators' interest in the project. The project's objectives were to: (1) develop and disseminate a comprehensive curriculum articulation guide in math and language disciplines. (2) Increase the number of secondary students, particularly minority, which meet community college and CSU admissions requirements and who matriculate to Southwestern College and San Diego State University. (3) Increase the number of students who enroll in and satisfactorily complete college preparatory courses. (4) Increase the number of student placements in college level courses in mathematics and math-related areas. (5) Increase the percentage of students who qualify for college-level math courses by their scores on the Entry Level Math (ELM) exam at San Diego State University.

18. SCIENCE AND ENGLISH CURRICULUM PROJECT

Participants:

Newark School District
California State University, Hayward
Ohlone College

This project, which lasted one year (1985-86) was designed to "address the need to increase the college going rates of Hispanic students."

Funding: Funding for the 1985-86 fiscal year included \$37,256 from CAPP and \$83,000 in matching funds.

Curriculum areas: Selected science and English courses.

Direct participants: Hispanic students were to be targeted to receive tutorial assistance. The students were to be identified based on their scores on the CTBS. Students were to have scores above the 65th percentile. A total of 376 students, from seventh to twelfth grades, were identified as potential participants. Fifty-six percent of those identified were female and 44% were male. Two English teachers and one science teacher were involved in the project in 1985-86. Two local Hispanic community members acted as student counselors in the project.

Primary methods: Due to the project's premature withdrawal, none of the objectives were completed as planned.

19. SOCIAL STUDIES AND SCIENCE CURRICULUM DEVELOPMENT AND IMPLEMENTATION IN THREE STRANDS

Participants:

Vacaville Unified School District
SUCCESS Consortium
University of California, Davis
University of the Pacific
Sonoma State University
Solano Community College

The project's plans were to revise the district's social studies and science curricula in three strands: the concepts, the writing skills, and the critical thinking skills associated with social studies and science.

Funding: Funding for the 1985-86 fiscal year included \$50,900 from CAPP and \$63,000 in matching funds. Funding for the 1986-87 fiscal year included \$43,920 from CAPP and \$66,000 in matching funds.

Curriculum areas: Curriculum development in social studies and science.

Grade levels: Sixth through twelfth grades.

Primary methods: The project utilized inservice workshops for teachers, college students as tutors, counseling orientation in partnership with the SUCCESS Consortium, curricular development and revision, forums and seminars for students and teachers, team teaching, field trips, summer programs for students, and conferences for teachers.

20. SHARP: STOCKTON HONORS ADVANCED PLACEMENT RECOGNITION PROGRAM

Participants:

**Stockton Unified School District
University of the Pacific**

The SHARP project included curriculum revision, teacher inservice training, and tutoring and academic support for students.

Funding: Funding for the 1985-86 fiscal year included \$54,472 from CAPP and \$52,000 in matching funds. Funding for the 1986-87 fiscal year included \$37,571 from CAPP and \$112,000 in matching funds.

Curriculum areas: The project focused on curriculum development for honors and advanced placement courses across a wide range of subject areas: mathematics, science, English, and social sciences.

Grade levels: Twelfth grade.

Primary methods: Teacher inservice training included staff development on such topics as clinical teaching, teaching critical thinking skills, group study skills, and the relationship between teacher expectations and student achievement. Honors and advanced placement classes were added to the curriculum of Franklin and Edison High Schools. Tutoring was another primary method.

PROJECTS FUNDED IN 1987

**Language and Content Enrichment: Academic Partnership
for Curriculum Development (English and social studies)**

Participants:

**California State University, Long Beach
Huntington Beach Union School District
Long Beach Unified School District**

Project Description: The key activities of this project will include:

- (1) Collaboration of high school and university faculty on peer coaching to improve classroom communication and content comprehensibility;**
- (2) Analysis of curriculum materials and developmental guidelines for materials that will build on language experiences and develop academic English skills;**
- (3) Integration of a literature-enriched curriculum in English an history/social studies, college preparatory classes;**
- (4) Collaboration among high school and university personnel to develop strategies for teaching success learning and study skills;**
- (5) Yearly identification, scheduling and monitoring of students participation in the program; and**
- (6) On-going counselling of participating students and families, particularly in the context of evening homework coaching and tutorial.**

Academic Partnership in Science Education

Participants:

**California State University, Los Angeles
Pasadena Unified School District
Pasadena City College**

Project Description: To coordinate tutoring program staffed by PCC students.

Approximately 150 students from three Pasadena junior highs were selected during the months of March and April 1987 to participate in enriched Life Science and Physical Science classes during 1987/88 academic year. These classes were specially designed for these students to enhance their skills in reading in the content area, writing, and math during a Summer

Institute for curriculum development to be attended by the faculties of Muir and Pasadena High Schools, CSULA, and Pasadena City College. The Summer Institute's goals included the planning of science curriculum tailored specifically to the needs of underrepresented in postsecondary education students, the integration of information and techniques in the sciences from the University into the high school classroom, and the preparation of special instructional modules implemented by University faculty in the high school classroom.

This enriched curriculum in Life and Physical Science was implemented during the academic year with the support of the high school counseling staff, the faculty, and university and city college instructors who were both consulted on the curriculum and presented lessons in cooperation with the science teachers. Formative evaluation of the project, based on measures of student achievement on evaluation, guided the project's Advisory Committee in any course adjustments. Summative evaluation reports, the presentation of the curriculum, a portfolio of curriculum-referenced "science wonder and magic" laboratory procedures, and presentations on strategies for increasing student success in college preparatory sciences will be shared periodically with local school boards, faculty groups, county offices in curriculum development and science education, and other professional associations locally, regionally, and nationally during the three initial years of the project.

Academic Partnership to Develop Model Math and Science Curriculum

Participants:

California State University, Bakersfield
Bishop Joint Union High School District
Delano Joint Union High School District
Porterville College
Porterville Unified High School District

Project Description: This partnership, designed to extend over three years, will represent an effort to articulate math and science curriculums between high schools and two colleges. In the first year a Faculty Team composed of college and high school teachers will (1) review and revise extant math and science curriculums, (2) devise model curriculums, and (3) cooperatively teach these model curriculums on-site at the participating high schools. In the second year, the Faculty Team will train additional high school teachers in using the model curriculums. Cooperative teaching will again be a component of the second year effort, however, with less involvement by college faculty. In year three, the faculty team will familiarize junior high school math and science teachers with model curriculums, and assist junior high school teachers

in revising curriculums in order to articulate junior and senior high school math and science courses.

Academic Partnership: Teaching for Transition
from High School to College (English and social sciences)

Participants:

Dos Palos Joint Union High School District
California State University, Stanislaus
Merced Community College
Oro Loma Elementary District

Project Description: This project focuses on Language Arts and Social Studies courses to develop a model for curriculum revision to be used in all departments. Elementary, high school and college instructors will revise curriculum content and practices, develop a matrix of skills and competencies to be taught in each course grades 6 through 12, and actually teach the courses together through the use of the Television Learning Network, a live interactive system linking the high school in the university sixty miles away.

Mid-City Writing Project:
An Across the Curriculum Academic Partnership

Participants:

Oakland Unified School District
University of California, Berkeley
East Bay Consortium of Educational Institutions

Project Description: The vehicle is an across the curriculum writing program centered in language arts, social studies and science. The methods include teacher re-training, intervention counseling, the development of a peer writing coach cadre, together with a high degree of parent and community involvement. Key to the project's success will be the development of an effective portfolio assessment model and a uniform procedure for the evaluation of student work. One of the major outcomes of the project will be the establishment of a Demonstration Writing Academy at Bret Harte for teachers and students. Another is the widespread dissemination of the program's formats to schools inside and outside the Oakland District.

The program will involve extensive curriculum revision and at least a doubling of the amount of required writing.

**Academic Partnership for Improving
Life Science Instruction and Postsecondary Access**

Participants:

**Samuel Merritt College of Nursing
Oakland Unified School District**

Project Description: Our proposed project for improving the quality of life science instruction and student access to postsecondary education will expand and secure an already existing partnership between the College of Nursing and Oakland Public Schools. The goals of this project involve curriculum development, faculty cooperation, and student exposure, growth and success.

We have committed students and faculty and an excellent and supportive Steering Committee to address the lack of life science expertise in the Oakland Unified School District, especially in the areas of anatomy, physiology, and health science. We wish to stretch beyond textbook learning to inquiry approaches which empower students with knowledge and concept depth. We wish to develop study skill units and a peer tutoring development project which will train and support our students in the academic habits needed for excellence. We see the need to develop a real academic partnership which directly affects science instruction not only in the Health Academy, but also in the Oakland District at large.

Through a series of faculty and student symposia, classroom presentations and visitations, tutoring and student study group relationships, shadowing and role model experiences, and activities which increase knowledge and self-esteem, we will encourage and create opportunities for life science and health curriculum development and exchange, sharings of teaching strategies and methodologies, classroom peer faculty coaching, compilation of a local life science resource guide, and co-understanding of the needs and realities of both high school and college classrooms.

**Academic Partnership to Provide Intervention
Strategies Improving Academic Preparation (mathematics)**

Participants:

**Oroville Union High School District
Butte Community College
California State University, Chico
Oroville Elementary School District**

Project Description: Program components include a restructuring of the current math curriculum. This goal will be accomplished

through in-service training of educators, including a minimum of four guest instructor sessions in the classroom setting, a summer math institute aimed at improving educational strategies and the development of a peer tutoring program, where selected high school students will serve as cross-age tutors and role models for other students. Restructuring the curriculum will facilitate the goal of improving student academic preparation for postsecondary education.

Student workshops, conducted to improve test-taking strategies and build student test skills, and career planning, matching student interests with appropriate college/career options through testing and counseling, are also vital components of the program. The component of parental involvement, by holding seminars and providing family counseling, are aimed at improving the family setting in relation to students' educational needs and developing motivational strategies to keep interest active within the student.

The gain over time will be a cross-disciplinary increase in student aptitude, thereby, stimulating interest in both completing and furthering endeavors. Because Las Plumas is not unique in regard to drop-out and college enrollment problems, this project is easily replicable, cost-effective, and can be disseminated elsewhere.

SHOWCASE PROJECTS

Project STEP: An Academic Partnership for the Advancement of Learning (mathematics, science and English)

Participants:

University of California, Irvine
California State University, Fullerton
Chapman College
Rancho Santiago Community College
Santa Ana Unified School District

Project Description: Propose to complete development of the STEP model in the Santa Ana Unified School District. CEO designated representatives on the STEP Administrative Council, based on evaluative data have determined a comprehensive set of activities designed to improve instructional methods in mathematics and science, provide earlier intervention involving parents, continue tutorial services and to disseminate the model within the state and initiate adaptation efforts of the model at two specific sites (Compton and Long Beach). The STEP collaborative program strategies will focus on three interdependent functional areas: (1) Mathematics, Science and English academic preparation, (2) Student Academic Support and

Future Teacher Recruitment, and (3) Faculty Forums/ Dissemination. Project STEP will act as a demonstration site for all interested partners who wish to learn about the STEP principles of successful college/secondary school collaboration. We plan to promote and disseminate information re STEP model at appropriate conferences involving every sector of the educational continuum. A specific Dissemination Forum is planned for southern (UCI) central (Fresno) and northern California (UC Berkeley). Documentation and planned dissemination activities form an essential part of the project. The proposal will result in publication of a Handbook for the Establishment of Partnership for the Advancement of Learning which is to be distributed to the 105 California Community Colleges, the 18 California State University campuses, eight campuses of the University of California and all County Departments of Education throughout the state.

Project - Gateways Through Academic Partnerships (mathematic. science and English)

Participants:

Pajaro Valley Unified School District
University of California, Santa Cruz

Project Description:

- . **Saturday Science and Mathematics Academy.** Seventh and eighth grade students visit the UC-Santa Cruz campus to day-long educational programs conducted by UCSC faculty members and graduate students. Activities provide students with hands-on experience with science and mathematics, encourage participation in science and mathematics studies, and stimulate interest in pursuing postsecondary studies.
- . **Summer Science and Mathematics Academy.** Students who have completed the ninth or tenth grades are introduced to postsecondary education through a week-long, residential program on the UC-Santa Cruz campus. The Academy's full schedule of classes, laboratory activities, and field trips, conducted by UCSC faculty members and graduate students, emphasizes the integration of science and mathematics through a thematic, cross-disciplinary curriculum. Each student maintains a computer-based journal in an activity which provides feedback on Project activities and encourages writing within science and mathematics.
- . **Curriculum Workshops.** In the Project Year One, five mathematics teachers participate in an intensive program of staff and curriculum development, focusing on Introduction to Algebra, one of Watsonville High's "gateways" to college preparatory studies. This activity implements District and school plans for strengthening the mathematics program, and

includes participation in UC-Santa Cruz's regional sites of the California Mathematics Project and the California Mathematics Diagnostic Testing Project. Products include a publishable curriculum and a curriculum development process to be applied in developing other "gateway" courses in subsequent years.

- . **Project Dissemination.** These Project activities include publication of the Introduction to Algebra curriculum, a series of Partnership Reports, and periodical articles derived from those reports. In addition, participants will present Project experiences at educational conference, and the Project will convene a "Monterey Bay Area Conference on Academic Partnerships" on the UC-Santa Cruz campus.
- . **Project Evaluation/Assessment.** This Showcase Project places substantial emphasis on documenting (and reporting) the Project's effects on participating students, teachers, and school administrators, particularly the effects of providing academic support activities at critical grade levels. Evaluation activities include (a) surveying students' attitudes toward science and mathematics, and postsecondary studies, (b) monitoring the participating students' enrollment and achievement in college preparatory courses, and (c) monitoring changes in the numbers of graduating students who pursue postsecondary studies.

DISSEMINATION PROJECTS

Mathematics Diagnostic Testing Project

Participants:

University of California, San Diego
University of California, Santa Cruz
University of California, Berkeley
University of California, Davis
University of California, Los Angeles
California State University, Fullerton
California State University, Fresno
California State University, Sacramento
California State University, Chico
California State University, San Luis Obispo

Project Description: The project proposes to impact student achievement and math curriculum in secondary schools by making appropriate math diagnostic tests available to interested secondary school teachers for voluntary use with their students. The project provides test materials, scores completed

tests, and returns the results and related diagnostic information to the teachers for distribution to students.

Recent activities of the project have resulted in more involvement and interaction of project staff with the California Math Project, junior high schools, community colleges, and school counselors. In addition, a longitudinal study is underway to document the impact of the project on participating teachers and students.

Reaching University Writing Standards

Participants:

University of California, Los Angeles
California State University, Northridge

Project Description: This proposal will form an intersegmental workgroup to collect analytical assignments and evaluation techniques developed by teachers as a result of their participation in the 1985-87 UCLA-CSUN-Schools Writing Exam project. The group will publish them along with the project's exams, its guidelines for responding to student writing, and the results of its research pilots on the effects of written comments and on ways to help ESL students read and write analytically. After review by experienced university and high school teachers, the book will be introduced to the directors of all the California Writing Project sites, and complimentary copies will be provided to the approximately 400 fellows of the 1988 Writing Projects. They will be able to draw on the book's materials and insights in the in-service work they provide teachers in their schools.

There are certain categories of information which are common to all projects and others which could be important to the evaluation process. The following list covers both the basic information which is essential that you begin collecting now and a more comprehensive list with areas to be used as a guide for other types of data collection you may consider. (Items marked with an asterisk (*) are those which have been indicated by the California Postsecondary Education Commission evaluator as being essential basic information.)

I. Background and Context of the Project

A. Setting (School and Community Demographic Data)

1. *Population Characteristics (i.e., age, *ethnic/racial composition, *mobility and growth rate, *adult educational attainment)
2. *Economic Characteristics (i.e., *occupations, *unemployment rate, *family income, *tax base, *growth)
3. *School System Characteristics (i.e., *grade level(s) served; number of pupils in system; number of schools; types of schools; teacher/pupil ratio; trends in enrollments (past 5 years); withdrawals and transfers; *curricula at school site-specific courses offered; *academic/vocational split; other special programs at school; *5 years of achievement *(CAP mean scores, *dropout rates, *college going (2 year or 4 year); *college performance and *persistence of graduates)

B. Project Origins (i.e., needs assessment-type/result; determination of priorities)

C. Project Goals and Objectives (i.e., what they are, how they were set and by whom)

D. Historical Background (i.e., project precursors)

E. Target Population

1. *Students (i.e., *age; *gender; grade level; ability level; *ethnicity; number served; selection process for participation; grouping procedures by ability, by class, by school)

2. Teachers, College & University Faculty, Administrators, Parents (i.e., background, qualifications, experience, selection process for participation)

F. Project Personnel

1. *Intersegmental Participation (i.e., *kind; *full-time/part-time; *qualifications/background; *role description-administrative, instructional or support)
2. Training Provided by Project

G. Administration

1. Intersegmental unit with primary responsibility
2. Administrative procedures/staffing

J. Budget

1. Total cost of project implementation (including CAPP grant)
2. Other sources of project funds
3. Budget breakdown for replication purposes (i.e., estimates of startup costs vs continuation costs)
4. Budget breakdown by categories and amounts (i.e., materials development, staff training, support services, information dissemination, staff salaries, project maintenance)
5. Per pupil/participant cost

II. Planned Critical Project Features-Materials and Activities

A. Major planned program characteristics (outline)

1. Major materials used
2. Activities engaged
3. Persons responsible for implementing each feature
4. Target participants in each activity and how these will be monitored/tracked
5. Amount of progress projected by a certain time
6. Rationale underlying the project
7. Possibility for replication (i.e., prescriptiveness of project; possibility of variation)

B. Internal Evaluation

- 1. Techniques for monitoring and modifying operations on a daily basis**
- 2. Periodic review plans**

III. Implementation Evaluation Measures

A. Range of measures and data collection

- 1. Types (i.e., informal: casual observations and conversations with project staff; formal: systematic observation, questionnaires, *standard test data (CTBS, CAP), *transcript information, description of curriculum changes)**
- 2. Process for obtaining data (privacy act considerations)**

IV. Results of Evaluation Measures/Description of Project Implementation

A. Overview

- 1. Project resemblance to original proposal**
- 2. Materials/audience/implementation**
- 3. Modifications of original proposal**
- 4. Degree to which goals and objectives were met (verification with appropriate data)**

B. Specific Findings

- 1. Materials developed (i.e., types, frequency and location of use, interest/stimulation level, degree to which project goals and objectives were met)**
- 2. Activities (i.e., type, frequency and location of use, interest/stimulation/motivation level, degree to which project goals and objectives were met)**
- 3. Control or comparison group**

V. Summary with Major Findings and Recommendations

Beyond this, you should, of course be maintaining a record of expenditures so that the cost of particular facets of your project can be determined. Also, if your objective will require use of a comparison group, you should collect the same baseline information as above on the comparison group.

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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of April 1989, the Commissioners representing the general public are:

Mim Andelson, Los Angeles;
C. Thomas Dean, Long Beach;
Henry Der, San Francisco;
Seymour M. Farber, M.D., San Francisco;
Helen Z. Hansen, Long Beach;
Lowell J. Paige, El Macero; *Vice Chair*;
Cruz Reynoso, Los Angeles;
Sharon N. Skog, Palo Alto; *Chair*; and
Stephen P. Teale, M.D., Modesto.

Representatives of the segments are:

Yori Wada, San Francisco; appointed by the Regents of the University of California,

Claudia H. Hampton, Los Angeles, appointed by the Trustees of the California State University;

John F. Parkhurst, Folsom; appointed by the Board of Governors of the California Community Colleges;

Harry Wugalter, Thousand Oaks; appointed by the Council for Private Postsecondary Educational Institutions,

Francis Laufenberg, Orange; appointed by the California State Board of Education; and

James B. Jamieson, San Luis Obispo; appointed by the Governor from nominees proposed by California's independent colleges and universities.

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other State agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning,

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, the Commission's meetings are open to the public. Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request prior to the start of the meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, Kenneth B. O'Brien, who is appointed by the Commission.

The Commission publishes and distributes without charge some 40 to 50 reports each year on major issues confronting California postsecondary education. Recent reports are listed on the back cover.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 95814-3985, telephone (916) 445-7933.

EVALUATION OF THE CALIFORNIA ACADEMIC PARTNERSHIP PROGRAM (CAPP)

California Postsecondary Education Commission Report 88-13

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985

Recent reports of the Commission include

88-6 Comments on Educational Equity Plans of the Segments A Staff Report on the Development of Plans by the State Department of Education, the California State University, and the University of California to Achieve the Educational Equity Goals of Assembly Concurrent Resolution 83 (1984) (February 1988)

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88-19 Volume Two Findings, by Paul Berman, Jo-Ann Intili and Daniel Weiler, December 1987 (March 1988)

88-20 Volume Three Appendix, by Paul Berman, Jo-Ann Intili, and Daniel Weiler, January 1988 (March 1988)

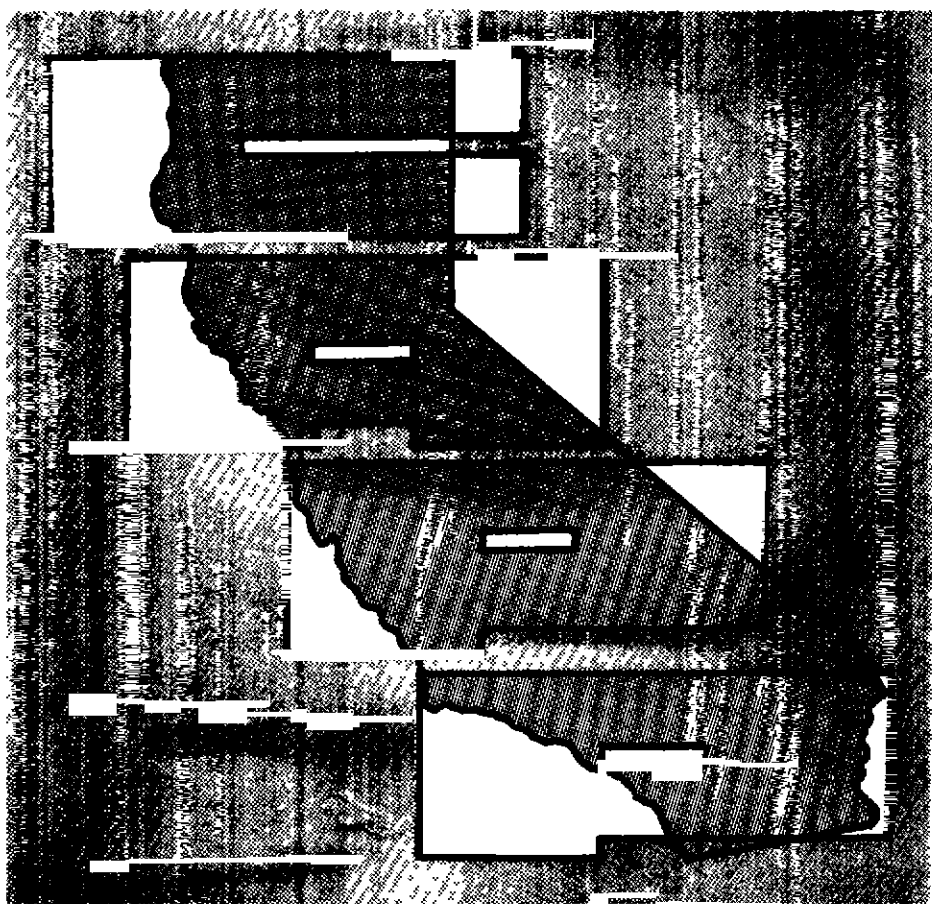
88-21 Staff Development in California's Public Schools Recommendations of the Policy Development Committee for the California Staff Development Policy Study, March 16, 1988 (March 1988)

88-22 and 23 Staff Development in California. Public and Personal Investments, Program Patterns, and Policy Choices, by Judith Warren Little, William H. Gerritz, David S. Stern, James W. Guthrie, Michael W. Kirst, and David D. Marsh A Joint Publication of Far West Laboratory for Educational Research and Development • Policy Analysis for California Education (PACE), December 1987

88-22 Executive Summary (March 1988)

88-23 Report (March 1988)

EVALUATION OF THE CALIFORNIA ACADEMIC PARTNERSHIP PROGRAM (CAPP)



CALIFORNIA POSTSECONDARY
EDUCATION COMMISSION

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88-23 Report (March 1988)

Executive Summary

ASSEMBLY BILL 2398 (1983, Hughes) directed the California Postsecondary Education Commission to submit an evaluation of the California Academic Partnership Program (CAPP) to the Legislature by January 1, 1988 and to include in it "indicators of increases in the number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the programs by participating school districts and postsecondary institutions, together with recommendations from the Commission for the improvement of the program "

Because of delays encountered by the California State University in gathering data for the Commission's evaluation, this report was delayed until March 1988. In it, the Commission offers six conclusions about the 20 curriculum development projects funded by CAPP between 1984 and 1987, and two about CAPP's three diagnostic testing projects (pp 25-26)

Curriculum development projects

- 1 The 20 curriculum development projects have a mixed record of success in achieving their objectives, with some of the projects clearly outstanding, some effective, and several ineffective. The successful projects had a positive impact on students in increasing postsecondary enrollments and improving preparation for baccalaureate work.
- 2 CAPP has stimulated meaningful school and college partnerships involving the University of California, the California State University, the California Community Colleges, and independent colleges and universities in the areas of curriculum development and teacher in-service training. Replication of these partnerships in other regions of the State would be beneficial.
- 3 Effective school and college partnerships are characterized by several important elements, which are described on pages 6 and 7 of this report. The evaluation of the 20 curriculum development

projects validates the importance of these elements and illustrates the particular importance of (1) mutual trust and respect among faculty and (2) the quality of the individuals, both in administrative and teaching roles, who have primary responsibility for development of the partnership roles.

- 4 While the operation of CAPP has included extensive evaluation activities, these activities have not resulted in the information necessary for drawing conclusive statements about the impact of the program in improving the preparation of students for college. The Chancellor's Office of the California State University and the CAPP advisory committee have reached the same conclusion and have devised an evaluation plan for the 1987-90 projects that will be more outcome oriented.
- 5 The direct involvement and commitment of the program advisory committee and the statewide liaison representatives have been essential to the development and implementation of the projects.
- 6 Despite some initial difficulties, the administration of the program by the Office of the Chancellor of the California State University appears satisfactory.

Diagnostic testing projects

- 7 The Mathematics Diagnostic Testing Project has demonstrated considerable success, experiencing increasing demand from mathematics teachers and secondary schools from throughout the State, and utilizing a growing share of the resources of CAPP.
- 8 The two diagnostic testing instruments developed in composition and writing, although effective, do not appear to be usable statewide because of their high cost.

Based on these conclusions, the Commission offers six recommendations about the future of the Califor-

nia Academic Partnership Program (p 27)

- 1 The California Academic Partnership Program should be continued and current funding levels maintained, with appropriate cost-of-living adjustments, pending a second comprehensive program evaluation by January 1991
- 2 Annual reports should be required of each CAPP project and a comprehensive program evaluation should be conducted prior to January 1991, and every third year thereafter, by the Office of the Chancellor of the California State University. The report of this comprehensive evaluation should be submitted to the Legislature, the Governor, and the Postsecondary Education Commission, and the Commission should review and comment on these evaluations as appropriate
- 3 The design for the comprehensive program evaluation should be jointly developed by the California State University, the California Postsecondary Education Commission, and the CAPP advisory committee. The evaluation should be outcome oriented and should include a follow-up study to determine the ongoing impact of CAPP on students, teachers, and the curriculum
- 4 The present administration of CAPP by the California State University as an intersegmental program should be continued
- 5 The Mathematics Diagnostic Testing Project should be funded by the Legislature and Governor for implementation on a statewide basis with test materials and scoring services available to all California mathematics teachers in secondary schools and Community Colleges who request them. Staff of the State University's Office of the Chancellor should work with the Intersegmental Budget Committee to develop and submit to the Department of Finance budget requests for the Mathematics Diagnostic Testing Project as well as the California Academic Partnership Program for inclusion in the 1989-90 budget
- 6 CAPP project staff and participants should be encouraged, supported, and expected to make presentations at appropriate curriculum and professional workshops and conferences for both schools and colleges, in order to disseminate project information on intersegmental approaches to enhance the preparation of secondary school students for college

Origins and goals of the program

The California Academic Partnership Program (CAPP) was initially established under the Hughes-Hart Educational Reform Act of 1983 (Senate Bill 813 and Section 11000 of the *Education Code*) as a way to "provide academic and counseling services to students in grades 7 to 12, and to increase the involvement of postsecondary educational institutions in efforts to improve the academic quality of public secondary schools." The program was one of a series of reforms incorporated in Senate Bill 813, which also included increased graduation requirements, increased instructional time within the school day, and a longer school year. At the same time, the University of California and the California State University were reviewing and increasing their requirements for admission.

The following year, the Legislature passed Assemblywoman Teresa Hughes' Assembly Bill 2398 (reproduced in Appendix A), which expanded the scope of the California Academic Partnership Program by providing that its purpose was also to "develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college." The goals of CAPP were to implement the concepts embodied in the legislation and, if its evaluation indicated, continue the program as an important part of the educational systems in California.

Administration of the program

CAPP is administered by the Trustees of the California State University in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the State Superintendent of Public Instruction. All fiscal and administrative matters relative to the conduct of the program are the responsibility of a director hired by the Chancellor of the State University. The program has had two directors in the three

years of its existence, with the current director, Deborah Osen Hancock, hired on September 1, 1986.

Work and members of the advisory committee

An important element in the program has been the active involvement of its advisory committee, which was charged in AB 2398 "to assist in selecting proposals to be funded and developing criteria for project evaluation." The committee has met periodically to complete this activity. It currently consists of the following individuals.

- Robert O. Bess, Executive Vice President, California State University, Sacramento, representing the Office of the Chancellor, The California State University,
- Dennis J. Galligani, Assistant Vice Chancellor for Academic Affairs, University of California, Irvine; representing the Office of the President of the University of California,
- William R. Ellis, Professor of Architecture, University of California, Berkeley; representing the Academic Senate of the University of California,
- Nancy Gray, Consultant, Language Arts (Secondary), Long Beach Unified School District; representing the California State Department of Education,
- Levell Holmes, Professor of History, Sonoma State University; representing the Academic Senate of the California State University;
- Doug Kirkpatrick, Science Teacher, Foothill Intermediate School, Mt. Diablo Unified School District, representing the California State Department of Education;
- Linda Morales, Science Teacher, Kern Union High School District, representing the California State Department of Education,

- Hilda Solis, Director, South Coast EOPS Consortium, representing Cal-SOAP,
- Donald Villeneuve, Professor of Biology, Ventura College, representing the Academic Senate for the California Community Colleges,
- Patricia Wainwright, Dean of Student Services, Los Angeles Harbor College, representing the Chancellor of the California Community Colleges
- Linda Barton White, Postsecondary Education Specialist, California Postsecondary Education Commission, representing the Commission, and
- Shereene D Wilkerson, Vice Principal, Willis Jepson Junior High School, Vacaville Unified School District, representing the California State Department of Education, *Chair*

The following individuals serve as liaison between each segment and CAPP

- Connie Anderson, Dean, Transfer Education and Articulation, California Community Colleges
- Stephanie McGraw, Dean, Outreach and Retention, The California State University
- Barbara Brandes, Administrator, Special Programs Unit, California Department of Education
- Sandra Douglas, Coordinator, Academic Skills and Remediation, University of California
- Sherryl Lucarelli, Director, Letters, Arts, and Sciences Academic Relations, University of Southern California, representing the Association of Independent California Colleges and Universities

Components of CAPP

CAPP has two major components -- curriculum development and diagnostic testing. Its curriculum development projects focus on improving the secondary school curriculum, while its diagnostic testing projects seek to assess student abilities in specific subject matters -- specifically, writing and mathematics. Both components were to be implemented utilizing partnerships between K-12 districts and institutions of higher education, and with special emphasis placed on underrepresented students.

Curriculum development projects

AB 2398 authorized curriculum development projects that "address improvements in secondary school curriculum and the ability of students to benefit from these improvements." During the first two funding cycles, 1984 to 1987, CAPP funded 20 pilot curriculum development projects.

- 1 Five Star Academic Partnership -- Fillmore
- 2 A Junior MESA Program for Rural and Metropolitan Students -- Bakersfield
- 3 Ethnic Literature: A Model for Teaching Critical Thinking Skills -- Sacramento
- 4 Language Instruction Across the Content Areas: Learning From Text -- Northridge
- 5 Academic Partnership to Improve Social Studies Curriculum -- Sonoma
- 6 High School/College Partnership Produces Prepared Students -- Sacramento
- 7 Project Step -- Irvine/Santa Ana
- 8 Gateways Through Academic Partnership -- Watsonville
- 9 College Partnership Produces Prepared Students -- Montebello
- 10 The Quantitative Educational Development Project -- San Diego
- 11 Linking Resources for Students Underrepresented in Higher Education -- Santa Barbara
- 12 Mathematics: New Courses in the 9-12 Academic Preparation Sequence -- Davis
- 13 Academic Partnership to Improve College Preparation -- Wilmington
- 14 College Aspiration Partnership Program -- Irvine/ABC/Cerritos
- 15 The Mathematics Awareness and Skill Development Program -- Whittier
- 16 The College Preparatory Tutorial Center Project -- Dominguez Hills/Lawndale
- 17 Comprehensive Math and Language Articulation and Tutorial Program -- Chula Vista
- 18 Science and English Curriculum Project -- Hayward (one year only)

- 19 Social Studies and Science Curriculum Development in Three Strands -- Vacaville
- 20 Stockton Honors Advancement Placement Recognition Program (SHARP) -- Stockton

For 1987-88, the advisory committee recommended funding two continuing projects and seven new projects. The two continuing projects are

- 1 Gateways Through Academic Partnerships -- Watsonville
- 2 Project STEP -- Irvine/Santa Ana

The seven new projects are

- 1 Language and Content Enrichment -- Long Beach
- 2 Academic Partnerships in Science Education -- Pasadena
- 3 Develop Model Math and Science Curriculum -- Bakersfield
- 4 Teaching for Transition from High School to College -- Merced
- 5 An Across the Curriculum Academic Partnership -- Oakland
- 6 Life Science Instruction and Postsecondary Access -- Oakland
- 7 Strategies Improving Academic Preparation -- Oroville

During the current funding cycle of 1987-1990, the two continuing projects in Watsonville and Santa Ana have been distinguished as "Showcase" projects designed to serve as models of maturing academic partnerships successful in establishing comprehensive approaches to curriculum development. The Commission describes all of these projects in Appendix B, but in this evaluation report it analyzes only those funded from 1984 through 1987.

All curriculum development projects are designed to enhance the academic preparation for college of all students, but especially those underrepresented in postsecondary education. Their unique feature is collaboration between faculty at postsecondary educational institutions and teachers in junior and senior high schools. The desired outcome of this collaboration is improved secondary school curricula that result in more students being better prepared for college.

The methods employed by the curriculum projects in meeting their objectives include

- team teaching between high school teachers and university faculty,
- workshops for students and teachers,
- diagnostic testing of students;
- tutorials for students,
- student orientation activities and field trips to campuses and
- summer and Saturday institutes for teachers

Diagnostic testing projects

AB 2398 also called for "a voluntary cooperative program for the academic assessment of secondary school students in the state" in order to analyze their readiness for college-level work, identify their academic needs to secondary teachers and counselors, and reduce the demand for remedial programs at the postsecondary level. These projects have been identified as *diagnostic testing* projects, three of which were funded by CAPP between 1984 and 1987 in mathematics and writing -- the Mathematics Diagnostic Testing Project that serves high school teachers throughout the State, and two writing diagnostic testing projects, one in northern California -- the High School Diagnostic Testing Program in Composition -- and the other in southern California -- the Writing Exam for Eleventh Graders.

The Mathematics Diagnostic Testing Project continues to be supported by CAPP funds, but both writing projects were discontinued as diagnostic testing projects in the second funding cycle of 1987 to 1990 because of their high cost per student. CAPP has funded the southern California project as a dissemination project for 1987-88, however, in order to produce a book of materials and evaluation techniques gathered by it.

Funding history

In 1984, CAPP received \$1 million from the Legislature to begin operation. In the first year (1984-85), it funded 13 curriculum development projects and three diagnostic testing projects. In the second and third years of funding (1985-86 and 1986-87), it

increased the number of curriculum development projects to 20 while retaining the same number of diagnostic testing projects. Display 1 below shows the funding history for the program.

Characteristics of collaborative efforts

Many efforts have been undertaken over recent decades to revise the secondary school curriculum and help secondary school students prepare for postsecondary education. During the 1950s, college professors and secondary school teachers collaborated nationally in revising the curriculum in the sciences, with the outcome of the "new math" and new chemistry and physics curricula. Although this close cooperation between college faculty and secondary school teachers eventually waned, it nonetheless demonstrated that such a partnership between college and secondary faculty was possible. During the 1960s and '70s, university faculty and students were more oriented to providing direct ser-

vices to secondary school students, but this approach was restricted by the small amount of time college faculty and students could devote to the schools and the limited number of students whom they reached.

CAPP's curriculum development projects return to the proven position that interested higher education faculty working directly with committed secondary teachers and active administrative support can improve the curriculum and positively affect students' preparation for college.

The literature on the subject of partnerships presents a guide to characteristics of successful academic collaboration. For example, in *School and College Partnerships in Education* (1983) Gene Maeroff identified five basic principles of successful collaborative efforts:

- 1 Educators at both levels must agree that they, indeed, have common problems
- 2 The traditional academic "pecking order" must be overcome
- 3 Cooperative projects must be sharply focused

DISPLAY 1 History of CAPP Funding, 1984 Through 1988

<u>Source</u>	<u>Total Program Funding</u>			
	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>
State Funds	\$1,000,000	\$1,410,000	\$1,508,000	\$1,524,000
Matching Funds	507,000	1,712,000	1,627,000	969,000
Total	\$1,507,000	\$3,122,000	\$3,134,000	\$2,494,000

<u>Project or Activity</u>	<u>State Funding by Type of Project or Activity</u>			
	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>
Curriculum Development	\$647,000	\$830,000	\$ 712,000	\$ 646,000
Percent of Total	65%	59%	47%	42%
Diagnostic Testing	247,000	371,000	488,000	560,000
Percent of Total	25%	26%	32%	37%
Administration	106,000	209,000	308,000	318,000
Percent of Total	10%	15%	20%	21%
Total	\$1,000,000	\$1,410,000	\$1,508,000	\$1,524,000

Source: California Postsecondary Education Commission

4. Those who participate must get recognition
- 5 School-college cooperation must focus on action -
- not machinery

Dennis J Galligani, in his report, *Effective Relationships for School/College Partnerships* (1987) identified nine characteristics existing in successful CAPP partnerships

- 1 Clear establishment of common goals that are recognized and developed cooperatively One project described this common effort as "a oneness of purpose "
- 2 Development of mutual trust and respect among faculty This entails the recognition of teachers as the "experts" in curricular reform
- 3 Provision of sufficient time to develop and strengthen the relationships among faculty and administrators, including unstructured time for faculty to get to know each other and have the time to think together in order to reach a mutual understanding of each other's contribution to the aims of the curricular enhancement effort (The importance of food as a catalyst in bringing people together cannot be overestimated)
- 4 The quality of the individuals, both in administrative and teaching roles, who have primary responsibility for developing the project
- 5 Continued and constant interaction between administrators and the faculty directly involved in carrying out the curricular enhancement efforts (Administrative reinforcement appears as crucially beneficial, whereas strict oversight appeared to have a negative impact)
- 6 Willingness to recognize and understand the different cycles and languages of the various educational segments (Along these same lines, flexibility is important in dealing with a variety of institutional policies and processes)
- 7 Periodic formative evaluation to ensure that the activities are effective in reaching commonly and mutually developed goals
- 8 Shared responsibility and accountability among the segments
- 9 Crisp lines of communication that are inclusive of individuals within project institutions rather than exclusive.

Such principles are useful both for organizing new collaboration and for evaluating current collaborative efforts such as CAPP

Evaluation of CAPP

AB 2398 directed the California Postsecondary Education Commission to submit a progress report on CAPP to the Legislature by January 1, 1986, and a final evaluation on or before January 1, 1988, that was to include "indicators of increases in the number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the programs by participating school districts and postsecondary institutions, together with recommendations from the Commission for the improvement of the program "

In December 1985, the Commission published its progress report on CAPP, *Progress of the California Academic partnership Program*, which emphasized the activities of each of its individual projects For the present evaluation, the Commission has sought to analyze the program as a whole Thus, its primary concern in this report is with achievements of the total program and the lessons that can be learned from its model of intersegmental and cooperative university-school partnerships

Commission staff identified the baseline data which projects should obtain in order to provide the basis for the Commission's evaluation Appendix C describes the baseline data requested for the curriculum development projects

The Office of the Chancellor of the State University hired three outside evaluators to collect information from the projects One of the three collected baseline data from each of the 20 pilot curriculum development projects as well as annual reports on the projects that included impact data from 1985 to 1987 The second evaluator was to assess the writing diagnostic testing projects, utilizing data gathered over the past three years The third evaluator was to evaluate the mathematics diagnostic testing project. The CAPP advisory committee ultimately decided to consolidate the latter two diagnostic testing evaluations by using one individual rather than two

The Commission has been assisted in its evaluation by Eugene Brucker, previously acting superintendent of the San Diego Unified School district, and by the firm of Deloitte, Haskins & Sells. Its assessment was also aided by two evaluation sessions held by CAPP during Spring 1987 -- one in northern California and the other in southern California -- in order to get the collective perceptions of project partners regarding successful and unsuccessful experiences in carrying out the curriculum development projects. A detailed description of these findings that provide useful information regarding effective partnerships can be found in *Effective Relationships for School/College Partnerships: A Qualitative Evaluation of the Curriculum Enhancement Projects Participating in the California Academic Partnership Program, 1984-1987*, by Dennis J. Galligan.

For this report, the Commission analyzed all evalua-

tions done to date plus the final reports submitted by the project directors. Several projects did not provide the requested information, and much of the data provided was limited in usefulness, since approximately two-thirds of that submitted by the 20 curriculum development projects was descriptive rather than outcome oriented. District and project data were sometimes interchanged, evaluative data did not, in many cases, lend themselves to analysis, and even where they did, the Commission was unable to separate the impact of CAPP from the impact of other reform activities also included in SB 813.

Like any new pilot program, however, a great deal has been learned during CAPP's initial years of implementation -- including the characteristics of successful partnerships and institutionalizing activities in the schools and activities supportive of curriculum change -- as the following pages will demonstrate.

2

Curriculum Development Projects

IN this section of the report, the Commission describes and assesses the overall operation of CAPP's curriculum development projects as experiments of secondary school teachers and university faculty working cooperatively to prepare students for college-level work.

Criteria for selecting projects

AB 2398 outlined eight criteria that CAPP's advisory committee was to consider when recommending funding for curriculum development projects

- 1 The inclusion of a comprehensive plan for curricular revision or enhancement and instructional change
- 2 The participation of postsecondary campus faculty working as equal partners with secondary school teachers in efforts to improve the quality of college preparatory instruction
- 3 The provision of activities and services designed to enhance the ability of students to benefit from college preparatory curricula
- 4 The provision of in-service training designed to increase college aspirations of students from groups with low participation rates in postsecondary institutions
- 5 The inclusion of procedures for the independent evaluation of the program budget
- 6 Plans for the participation of more than one secondary school
- 7 Plans for the inclusion of intermediate or junior high schools in the project
- 8 Plans for the continuation of the project after funding ceases.

In addition to these eight criteria, AB 2398 encouraged the advisory committee to develop its own criteria, and the committee required school districts

and postsecondary educational institutions to submit a joint application for CAPP funding

Display 2 on page 10 shows the locations of the 20 projects. Display 3 on page 11 lists the major activities of the projects and the frequency of each activity. Display 4 on page 12 presents information on the activities utilized in each individual project.

Project impact

Whenever several curriculum development or student activity projects are operating in a school or district, it is difficult to separate the impact of a specific individual project from that of others. However, because the CAPP projects are not duplicate efforts, some impact can be directly attributed to them, as the following paragraphs will describe.

Student participation

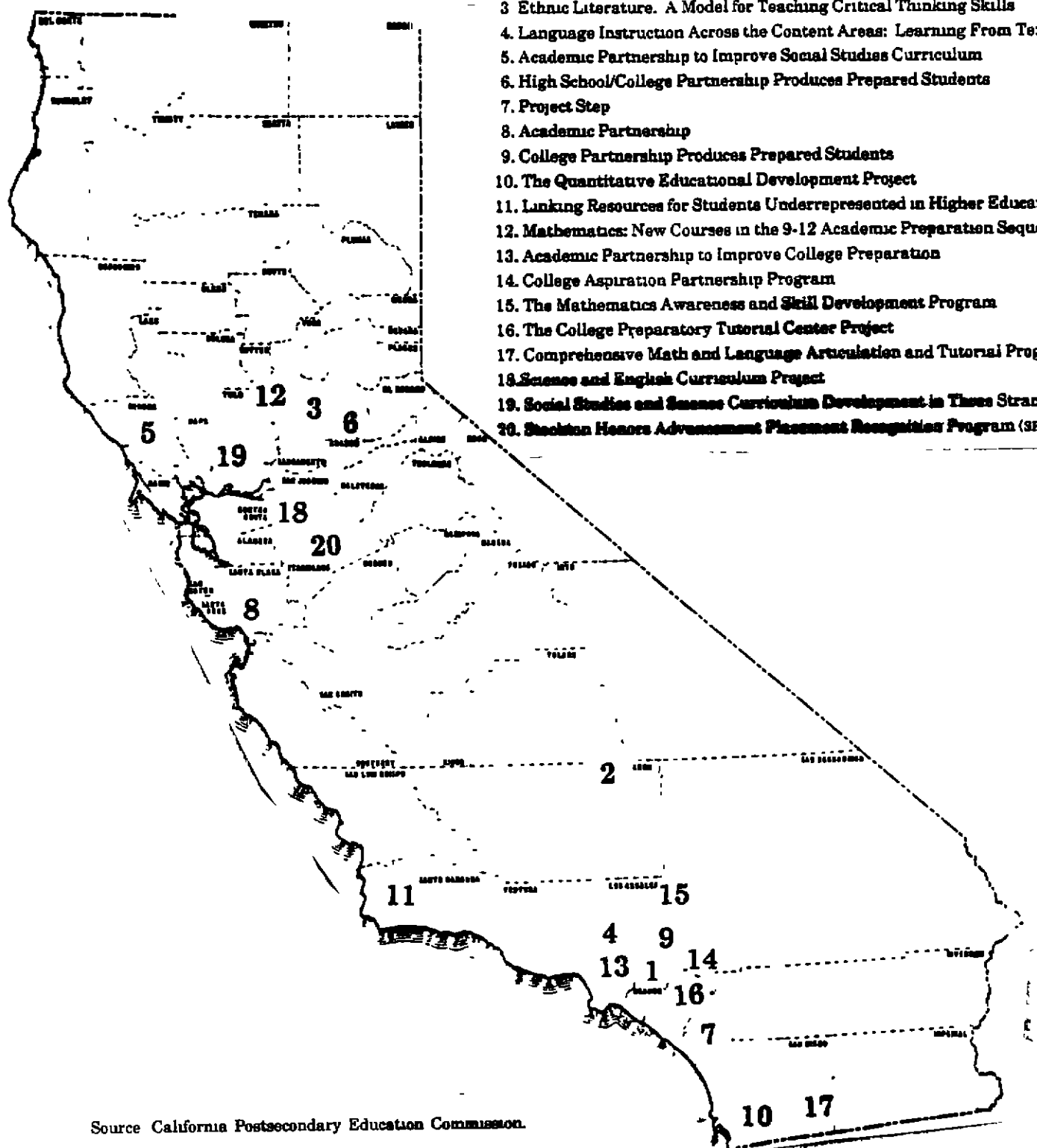
Over 80,800 students benefited directly or indirectly from the 20 curriculum development projects. Because some projects focused on teachers and revision of curriculum rather than student services, it is not possible to determine the extent of time spent in direct student services. The projects vary widely in the number of pupils they served, with some being quite selective and others reaching large student populations. Display 5 at the bottom of page 12 shows the projects' range in number of students served between 1984 and 1987.

Participation by ethnicity

One of the purposes of the CAPP legislation was to give funding priority to projects in schools whose students have low participation rates in postsecondary education or come from groups that are underrepresented in postsecondary education. Most evaluation reports from the projects included information on the ethnicity of students in the schools, and Display 6 at

DISPLAY 2 Geographical Distribution of CAPP's Twenty Curriculum Development Projects

1. Five Star Academic Partnership
2. A Junior MESA Program for Rural and Metropolitan Students
3. Ethnic Literature. A Model for Teaching Critical Thinking Skills
4. Language Instruction Across the Content Areas: Learning From Text
5. Academic Partnership to Improve Social Studies Curriculum
6. High School/College Partnership Produces Prepared Students
7. Project Step
8. Academic Partnership
9. College Partnership Produces Prepared Students
10. The Quantitative Educational Development Project
11. Linking Resources for Students Underrepresented in Higher Education
12. Mathematics: New Courses in the 9-12 Academic Preparation Sequence
13. Academic Partnership to Improve College Preparation
14. College Aspiration Partnership Program
15. The Mathematics Awareness and Skill Development Program
16. The College Preparatory Tutorial Center Project
17. Comprehensive Math and Language Articulation and Tutorial Program
18. Science and English Curriculum Project
19. Social Studies and Science Curriculum Development in Three Strands
20. Stockton Honors Advancement Placement Recognition Program (SHARP)



Source California Postsecondary Education Commission.

DISPLAY 3 Major Activities of the 20 Curriculum Development Projects

<u>Activity</u>	<u>Number of Projects Conducting This Activity</u>
Curriculum Development	19
Mathematics	12
Science	9
Social Science	4
Language Arts	11
Critical Thinking	7
Writing	2
Tutorial	18
Inservice	17
Guidance	14
Testing	9
Seminars	9
Summer Programs	9
Team Teaching	8
Articulation	4
Field Trips	4
Teacher/Parent Liaison	4
Conferences	3

Note It should be noted that individual projects utilized multiple activities. One of the projects -- the Science and English Curriculum project in Hayward -- was not able to implement its proposed activities during the first year, and its funding was therefore terminated.

Source Office of the Chancellor The California State University

the top of page 13 lists the 12 projects that reported the number and percentages of ethnic minority graduates in 1984 and 1985. Projects not listed did not report such data. As can be seen, 10 of the 12 projects involved schools with a majority of minority graduates in 1984, and 11 of the 12 did so in 1985.

In all but one of the projects, the percent of minority graduates remained the same or increased between 1984 and 1985, while in seven the actual number of graduates increased. As Display 6 illustrates, all of the projects except for one -- Santa Barbara -- had a larger participation rate by ethnic minority students than the statewide rate for high school graduates, and consequently the Commission concludes that

the projects were successful in assisting underrepresented students.

Students completion of "A-F" requirements

The number of students in project schools who enrolled in courses fulfilling the University of California's "a-f" course requirements is a second measure of CAPP's effectiveness. Using 1984-85 as a baseline year, 15 projects showed an increase within one year in students taking "a-f" courses. Individual projects showing increases ranging from +0.7 percent up to +22.2 percent. Two projects showed a decrease, one remained the same, and two junior high school projects did not provide this information.

By 1986-87, 12 projects increased the enrollment of their students in "a-f" courses over 1985-86, while two remained the same and two decreased enrollment. This comparison is based on data reported from all but one of the projects which served high school students. The reasons for the decreases could not be determined.

Students taking college admissions examinations

A third measure of success for the CAPP projects is an increase in the number of students who elected to take the Scholastic Aptitude Test (SAT) or the Assessment of the American College Testing Program (ACT). In the 15 projects reporting comparable data for 1984-85 and 1985-86 the number of students taking the tests increased by 198 -- an increase of 4.9 percent, not adjusted for enrollment. Specifically, in 1984-85, 5,282 students in 53 schools took the SAT, with three projects not providing information. In 1985-86, 7,639 students in 71 schools took the SAT, while one project utilized the ACT Assessment, and one other project did not provide information.

Achievement test scores

Comparison of students' California Achievement Program (CAP) test scores before and during the CAPP projects provide some indication of the projects' impact, despite the fact that test scores have improved statewide for all students. Nineteen of the 20 projects reported twelfth-grade achievement test scores in reading, writing, and mathematics. The twen-

DISPLAY 4 Characteristics of Curriculum Development Projects

Project	Curriculum Area														
	Mathematics	Science	Social Studies	Language Arts	Creative Thinking	Writing	Inservice	Tutorial	Testing	Guidance	Articulation	Curriculum Development	Seminars	Team Teaching	Field Trips
1 Fillmore	•	•					•		•		•	•	•	•	
2 Bakersfield Area	•	•					•	•	•	•	•	•	•		•
3 Sacramento State				•	•		•	•	•	•		•	•	•	•
4 Northridge					•		•	•			•	•	•	•	•
5 Sonoma			•									•	•	•	
6 Sacramento City						•	•		•	•	•	•	•	•	•
7 Irvine/Santa Ana	•	•			•	•	•	•	•	•	•	•	•	•	•
8 Watsonville	•	•	•	•			•	•		•	•	•	•		•
9 Montebello				•	•		•		•	•	•	•	•	•	•
10 San Diego	•	•			•		•	•	•		•	•		•	•
11 Santa Barbara	•			•				•	•	•	•	•			•
12 Davis Area	•				•		•		•			•	•		•
13 Wilmington	•	•		•			•	•	•	•	•	•	•		•
14 Irvine/ABC/Cerritos	•			•			•	•	•	•	•	•	•	•	•
15 Whittier	•						•	•	•	•	•	•	•		•
16 Lawndale				•			•	•	•	•		•		•	
17 Chula Vista	•			•			•	•			•	•	•		•
19 Vacaville		•	•	•	•		•	•	•		•	•	•	•	•
20 Stockton	•	•	•	•			•	•	•	•	•	•	•	•	•

Note Project 18 in Hayward was not able to implement its proposed activities during the first year, and its funding was terminated.

Source California Postsecondary Education Commission

DISPLAY 5 Range of Students Served Between 1984 and 1987

Under 500 Students	500 to 999 Students	1,000 to 1,999 Students	2,000 to 3,000 Students	Over 3,000 Students
9 Montebello	2. Bakersfield	12 Davis	4 Northridge	1 Fillmore
14 Irvine/ABC	3. Sacramento State	15 Whittier	13 Wilmington	6 Sacramento City
	5. Sonoma	16 Lawndale	20 Stockton	7 Irvine/Santa Ana
	10 San Diego			8 Watsonville
	11. Santa Barbara			17 Chula Vista
	19 Vacaville			

Source Galligan, 1987

DISPLAY 6 Non-White Graduates as a Percent of Total Graduating Class, 1984 and 1985

<u>Project</u>	<u>1984 Graduates</u>	<u>Percent of Class</u>	<u>1985 Graduates</u>	<u>Percent of Class</u>	<u>Comments</u>
1 Fillmore	122	55 7%	91	56 5%	
3 Sacramento State	203	74 1	169	66 5	
4 Northridge	155	35 9	230	52 4	
6 Sacramento City	1,108	58 0	1,121	58 0	
7 Irvine/Santa Ana	816	75 0	853	77 0	
8 Watsonville	225	60 0	240	65 0	
9 Montebello	420	86 9	387	87 3	
11 Santa Barbara	59	14 2	92	23 3	Partial data (one high school)
13 Wilmington	595	89 4	514	89 9	
16 Lawndale	191	52 3	292	68 1	
17 Chula Vista	1,060	55 0	1,386	66 0	
20 Stockton	N/A	N/A	575	72 0	Not available for 1984
Statewide average, public high school graduates		37 8%		38 4%	

Note Data on the number of graduates as reported in *University of California Early Outreach Program, January 1987*. Three of the 20 projects involved junior high schools and are, therefore, not included here

Source Galligan, 1987

tieth was a junior high school project. Among the 35 schools in the 19 projects, improvements were registered by 29 in reading, 26 in writing, and 28 in mathematics — for a total of 83 improved scores across the three areas out of a possible total of 105.

Postsecondary enrollment

Another goal of CAPP was to increase the number of underrepresented students who participated in the projects and then actually enrolled in postsecondary institutions. The project evaluations focused on the University of California and the California State University, although Community Colleges and independent institutions actively participated in individual projects. The evaluation of this goal is limited by (1) the short time the projects have been in existence, and (2) the lack of follow-up studies conducted by the projects, but Display 7 on page 14 shows the postsecondary enrollment data for 10 of the 16 projects that provided services to high school students.

In eight of the ten projects, the number of pupils enrolling at the University of California or the California State University increased. As a percentage of the graduates, six projects showed a positive percentage increase, while four showed a decrease when comparing 1984-85 to 1985-86.

Postsecondary retention

Although the projects requested information from their student participants on their academic progress after one year at the University of California and the California State University, the resulting data were not consistent. Some projects provided information for 1983-84 and 1984-85, while other projects provided it for 1985-86 and 1986-87. Moreover, the available data are not clear about whether the students included in the statistics actually participated in project activities. Despite these limitations, 14 projects demonstrated an increase in student retention, four projects showed a decrease, and one project showed no change.

DISPLAY 7 District Students Enrolled at the University of California or the California State University, 1984 and 1985

Project	Graduates	1984		Graduates	1985		Percentage Point Difference 1984-1985
		Enrollment UC or CSU	Percent of Graduates Enrolling		Enrollment UC or CSU	Percent of Graduates Enrolling	
1 Fillmore	122	1	0.01%	91	8	7.8%	+7.79
3 Sacramento State	203	25	12.3	169	27	15.9	+3.6
4 Northridge	155	45	29.0	230	56	24.3	-4.7
6 Sacramento City	1,108	225	20.3	1,121	214	19.9	-0.4
7 Irvine/Santa Ana	816	115	14.0	853	122	14.3	+0.3
8 Watsonville	225	6	2.6	240	13	5.4	+2.8
9 Montebello	420	55	13.0	387	56	14.2	+1.2
13 Wilmington	595	74	12.4	514	102	19.8	+7.4
16 Lawndale	191	27	14.1	292	24	8.2	-5.9
17 Chula Vista	1,060	209	19.7	1,386	231	16.6	-3.1
Statewide average for recent high school graduates			16.6%			17.7%	

Source: Galligan, 1987

Dropouts

Although the Commission requested drop-out information as part of the baseline data for its evaluation of the curriculum development projects, it is unable to draw substantial conclusions from the information provided, due largely to three factors:

1. Base-year drop-out data for 1984-85 were not available,
2. Other funding besides CAPP was allocated for dropout prevention, making it impossible to identify the impact of CAPP, and,
3. Most students in the CAPP projects do not represent potential dropouts, since potential dropout students would not normally take college admission tests, complete the requirements of the University of California, or enroll in college.

Teacher participation

An essential part of the CAPP projects is the interac-

tion of school teachers and administrators with university faculty members. According to information provided by the 20 projects, a total of 1,493 teachers and faculty participated, with their participation ranging from continuing direct involvement to one-time attendance at an inservice activity. Display 8 on the opposite page shows the number of projects involving different levels of participation. It should be remembered that some of the projects involving small numbers of faculty and teachers emphasized student participation, while others emphasized teacher and faculty involvement.

Local objectives

An important part of each CAPP project is the locally developed objectives related to students, teachers, curriculum, and the partnership. The extent to which these local objectives are met, along with other evaluative data, help measure the individual project effectiveness. Although the Commission has tried to summarize the projects' accomplishment of

DISPLAY 8 *Range of Teachers Participating in the Curriculum Development Projects*

Number of Teacher Participants	Number of Projects	<u>Project Number</u>
1 - 25	Five	Projects 3, 9, 10, 11, and 15
26 - 50	Eight	Projects 8, 12, 13, 14, 17, 18, 19, and 20
51 - 75	None	No Projects
76 - 100	Two	Projects 1 and 2
101 - 200	Two	Projects 5 and 16
201 and over	Three	Projects 4, 6, and 7

Source California Postsecondary Education Commission

their local objectives, it has been unable to do so, primarily because most projects did not state their objectives in measurable terms, did not provide adequate information on outcomes, and did not have an evaluation design that allowed tracking of project success by individual objective. In several instances, projects also added and deleted objectives.

Nonetheless, the Commission was able to pull from the individual project evaluations examples of their impact in achieving local objectives.

Impact on students

- In the Santa Barbara project, more than two-thirds of the ninth and tenth grade students were re-programmed into higher level, more advanced classes as a result of the work of the project/teacher liaisons.
- In the Bakersfield project, grade-point averages of participating students improved significantly. For example, math grades improved, on average, from C+ to a B average. Overall, student grade-point averages improved by approximately the same amount, as did the grades in English and science.
- In the Santa Ana project, district enrollments of Hispanic high school students in advanced math classes increased from less than 3 percent to nearly 20 percent in the three years of the project.

Impact on college preparatory courses

- In the Stockton project, the overall enrollments in college preparatory courses increased by 50 per-

cent at all three district high schools during the two years of the project.

- In the Watsonville project, the number of mathematics and science college preparatory sections in the high school nearly doubled over the course of the three years of the project.

Impact on teachers

- District administrators and curriculum specialists in the Bakersfield project observed the following direct effects on project teachers: more time was given to project students (who were mainly minorities), more awareness of students' needs was demonstrated, project activities and ideas were used in the classroom, and these junior high teachers showed greater awareness of the importance of high school mathematics in assuring students' admission and success at four-year colleges.
- In 1986-87, 38 teachers in the Vacaville project were directly involved as CAPP team members, participating regularly in partnership workshops, observing and demonstrating lessons, and implementing new instructional techniques and content units in their own classes. All teachers completing a follow-up survey reported using the concepts, materials, and activities in their classrooms.

Impact on parents

- In the Santa Ana project, attendance rates at parent activities increased dramatically from 5 percent of project high school parents in 1985-86 to 25

percent in 1986-87. In the same period, participation of junior high parents increased from 6 percent to 50 percent.

Impact on the curriculum

- The "math-in-science" materials developed in the San Diego area project have become a permanent feature in the school curriculum and have been adopted in other eighth and ninth grade classes both within and outside the district.
- A social studies teacher reported on the effect of using the critical thinking materials developed by the Vacaville project: "They seem to have enabled students to use critical thinking skills not only in social studies but practically all areas. They have enhanced communication between the students and me, and between their peers."

Impact on schools

- At the Fairfax School District, the superintendent stated that the project served as the vanguard to bring about academic achievement for the entire school. Increases in student test scores and student learning were fostered by the public recognition, exposure to college options, personal growth, motivation, study skills, self-confidence, group cohesion, and academic awareness developed by the program.

Impact on the teaching profession

- The Montebello project was recognized by the National Council of Teachers of English as a "Center for Excellence." As such, it has received national recognition of its project-developed writing program.

Curriculum revision

One of the primary thrusts of CAPP is to promote cur-

riculum revision and change. A review of the evaluation reports indicates that all of the 20 projects (excluding the Hayward project) initiated curriculum revisions. In three of the projects, the revisions appeared to cover one-half year, while 16 involved full-year implementation.

Examples of impact on curriculum include the following:

- Increased hands-on activities, new curriculum guides, increased use of computers and a new shift from a conceptual focus to a problem solving focus.
- Production of an anthology and instructor's manual for teaching ethnic literature.
- Development and implementation of new units and courses in science and math.
- Preparation of a manual of typical writing assignments and rubrics designed to elicit "academic writing."
- Development and pilot testing of two new mathematics courses, in four districts, one at the seventh and eighth grade levels and one in grades 10 through 12.

Continuing activities

One of the legislative criteria for the curriculum development projects was the ability and/or commitment of the projects to continue the CAPP activities after the termination of funding. Although not an identifiable part of the evaluation data, the program director conducted a telephonic survey that showed a considerable number of CAPP activities were continuing. A summary of the information obtained is shown by individual projects in Display 9 on the opposite page, with 11 of the 19 projects reporting that the activities are being continued at the same or a greater extent than when CAPP funding was being provided, and only two projects reporting that all of the activities have been discontinued.

DISPLAY 9 Continuing Activities of CAPP Projects Funded from 1984 to 1987, as of January 1988

Project	Inservice	Tutorial	Testing	Guidance	Articulation	Curriculum Development	Seminars	Team Teaching	Field Trips	Teacher/Parent Liaison	Summer Program	Conferences	General Status
1 Fillmore	+		+		+	+	+	+		+		+	Continuing
2 Bakersfield Area	+	-	+	-	+	0	+		-	-	+	+	Continuing
3 Sacramento State	0	0	0	-	0	-	0	0	-	0	0		Discontinued
4 Northridge	-	0			-	-	-	0	+		0		*
5 Sonoma						-	-	-				0	*
6 Sacramento City	0	+	+	+	+	0	0	0	+	+	-		Continuing
7 Irvine/Santa Ana	+	+	+	+	+	+	+	+	+	+	+	+	Continuing
8 Watsonville	+	+		+	+	+	+		+		+		Continuing
9 Montebello	-		0	0	-	+	-		-				*
10 San Diego	0	+	+	+	+	-		+	0				Continuing
11 Santa Barbara		+	+	+	+	+			+	+	+		Continuing
12 Davis Area	-		0			+	-				0		*
13 Wilmington	-	+	+	+	+	-	-		+				Continuing
14 Irvine/ABC/Cerritos	-	0	-	-	-	0	0	0	0	-	-	-	*
15 Whittier	+	+	+	+	+	+	+	+				+	Continuing
16 Lawndale	0	0	0	0		0		0	0				Discontinued
17 Chula Vista	+	0			+	+	+		+				Continuing
19 Vacaville	-	0	0		0	-	-	0	0	0	0		*
20 Stockton	-	-	+	+	-	+	+	+	+				Continuing

Key + Same or greater - Lesser 0 Discontinued

* Generally the project activities are still continuing, but at a consistently lower rate than when CAPP funding was being provided

Note Project 18 in Hayward was not able to implement its proposed activities during the first year, and its funding was terminated.

Source Telephone survey by Deborah Osen Hancock, January 1988

3

Diagnostic Testing Projects

Criteria for selecting the projects

As noted in Part One, AB 2398 authorized CAPP's diagnostic testing projects in order to "establish a voluntary cooperative program for the academic assessment of secondary school students in the state." It directed the Chancellor of the California State University "to ensure that increased uses of assessment instruments assist in the following:

- 1 Reducing the demand for remedial programs at the postsecondary level,
- 2 Analyzing student readiness for college-level work,
- 3 Identifying the academic needs of students for secondary school teachers and counselors, and
- 4 Encouraging and giving priority to schools with low participation in institutions of postsecondary education or with concentration of students from groups which are underrepresented in postsecondary education."

CAPP's Advisory Committee accepted for funding the three assessment projects recommended by the Joint Projects Committee of the University of California and the California State University, which had developed criteria for these projects prior to the establishment of CAPP. These projects were the Mathematics Diagnostic Testing Project, the High School Diagnostic Testing Program in Composition, and the Writing Exam for Eleventh Graders. A subcommittee comprised of CAPP Advisory Committee members and representatives of the Joint Projects Committee assumed primary responsibility for monitoring these projects.

Location and emphases of the projects

- Display 10 on page 20 shows the locations of the three projects. The Mathematics Diagnostic Testing Project has ten sites around the State, with

five each on University of California and California State University campuses.

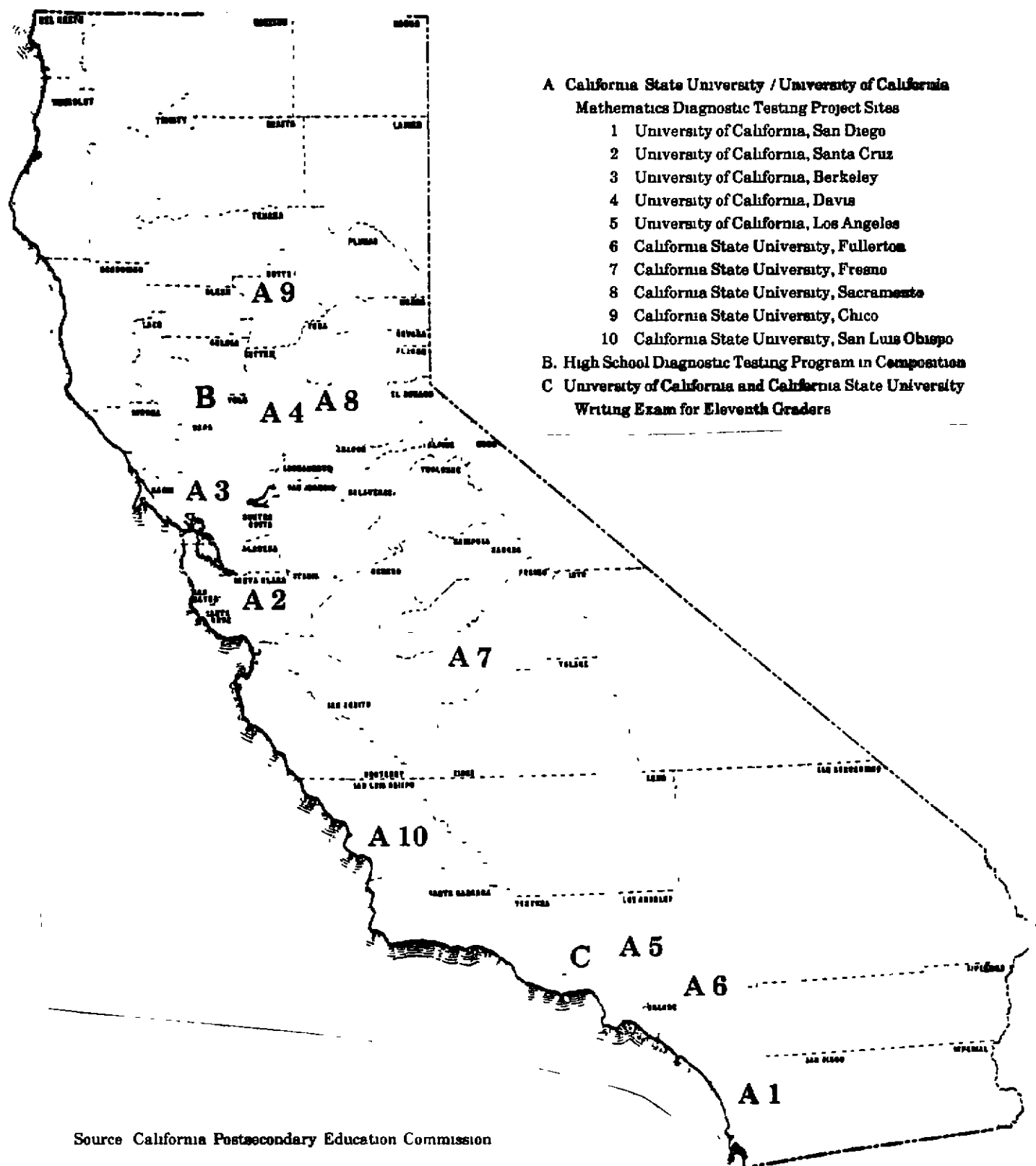
- The High School Diagnostic Testing Program in Composition was a cooperative program among the University of California, Davis, California State University, Sacramento, and 20 area high schools.
- The Writing Exam for Eleventh Graders is a cooperative program among the University of California, Los Angeles, and California State University, Northridge, with 13 senior high schools located primarily in the Los Angeles Unified School District.

Mathematics diagnostic testing project

The Mathematics Diagnostic Testing Project began in 1977 as a joint project of the California State University and the University of California. Its initial purposes were to (1) determine mathematics competency areas necessary for student success in postsecondary calculus courses and (2) develop diagnostic tests to assess skills in those competency areas. A communication network with secondary schools was also established in order to provide information to mathematics teachers regarding their students' preparedness for college mathematics and science courses.

As the project evolved, the need for additional diagnostic tests was identified and interactions between project staff and secondary school mathematics teachers became more frequent and formal. Due to the growth of the secondary school component of the project after 1980, it became evident that the resources contributed by the California State University and the University of California would not be adequate to support both those activities, and the rapidly growing postsecondary component. CAPP has therefore provided funding for the school service activities of the project's secondary student assessment efforts since 1984, while the California State Univer-

DISPLAY 10 Geographic Distribution of CAPP's Three Diagnostic Testing Projects



- sity and the University of California continue to support research and development activities related to secondary school testing

The current objectives of the project are to

- 1 Provide test materials and scoring services to all California mathematics teachers and schools who request them,
- 2 Continue development of an effective network of regional scoring sites that serve as resources to local schools and districts,
- 3 Provide information to 600 junior and senior high schools in 200 school districts on performance standards and curriculum expectations of the State University and the University of California in the area of mathematics,
- 4 Help high school counselors, students, and parents select appropriate high school mathematics courses based on the student's academic or career plans and mathematics competency, and
- 5 Encourage all students to get into the college preparatory track and stay in it until course work is successfully completed

The project provides four tests and associated scoring services without charge to California high school teachers

- A pre-calculus test that measures readiness for calculus,
- An intermediate algebra test measuring student readiness for mathematical functions and trigonometry courses,
- An elementary algebra test that measures skills essential for success in second-year algebra, and
- An algebra readiness test that reflects the State's new Mathematics Framework and Model Curriculum Standards and that is administered during the last course before first-year algebra, usually in junior high school

Test development and validity studies have been ongoing for at least the past ten years. A mathematics faculty work group from the three public segments of California higher education are responsible for helping guide the project and make changes in these tests

The project utilizes a computer-based scoring system

that is designed to give information to both the teacher and the student as to the level of competence achieved in the various topic areas covered by the examination

- All teachers receive topic-by-topic scores for each student in their classes together with class averages for each topic. A mastery level score for each topic is provided to enable the teacher to ascertain which of the topics have been successfully mastered by the students and which have not. In addition, a summary of the classes' responses to each test item is made available so the teacher can know which ideas and skills present difficulties for the class
- All students receive individual reports showing a topic-by-topic breakdown of their performance on the examination. Based on a comparison with the mastery level score, each student is given an indication as to the level of review necessary in each topic before mastery is achieved. This information serves as a guide to both the student and the teacher regarding the topics or sub-topics that should be emphasized during the remainder of the course, the topics the student should review outside the class before beginning further study, and which mathematics classes are appropriate for the student to take during the next school term

The project is in the process of implementing a longitudinal study that will focus on three questions

- 1 Do students whose mathematics teachers have used project tests show evidence of improved skills and better preparation for college?
- 2 Are there indications that teachers participating in the project are modifying the subject matter emphasis in their classes over time as a consequence of their participation?
- 3 Do students of various identifiable backgrounds such as socioeconomic status, ethnicity, gender, mathematics ability, and prior preparation receive comparable benefits from program participation?

High school diagnostic testing program in composition

The High School Diagnostic Program in Composi-

tion was a cooperative venture among the University of California, Davis, and the California State University, Sacramento, and 20 high schools to work with eleventh-grade students and English teachers in achieving these goals

- 1 To inform high school students about university composition standards and expectations, and, by use of a diagnostic examination with the university instructor responses, help these students identify academic skills they need to improve and offer them intensive instruction in revision as a means of improving their writing skills, and
- 2 To inform teachers of university expectations, standards, and examination formats, assist them in identifying the academic needs of their students and of needed curricular adjustments, and help them explore specific classroom strategies for improving students' writing skills

In 1984, the project tested 621 students in 15 high schools. During 1985-86, it worked with 62 eleventh-grade English teachers in 20 high schools, received and graded essays from 789 students at 19 high schools, and conducted a teacher inservice workshop for 41 teachers who were divided into two groups, one at the University of California, Davis, and the other at California State University, Sacramento, in order to maintain a small-group size and accommodate differences in the teachers' geographic location. Forty-nine students attended a special one-day student workshop in which participants who had previously written essays as part of the project were taught strategies for revising essays and then devised plans for revising their own essays. In 1985, the project worked with 25 eleventh-grade English teachers in 20 senior high schools and received and scored essays for 951 students.

The project did not collect student ethnicity data during its first two years, but in 1985-86, the State Department of Education's High School Performance Report Summary indicated that 39 percent of the eleventh grade students in the participating schools were minority students, as were 37 percent in 1986-87.

Writing exam for eleventh graders

The Writing Exam for Eleventh Graders project of

the University of California, Los Angeles, and the California State University, Northridge, originated as a small Subject A outreach program begun by the University of California, Los Angeles, in 1980. After taking the Subject A exam there, some 90 high school students received scores and explanatory comments written by the faculty of the University of California, Los Angeles. In 1982, the program began involving high school teachers in the evaluation of their students' work, both in scoring their papers and in writing comments to elicit revision. Between 1982 and 1984, evaluation workshops were conducted so that students could receive their work and revise it while still in their eleventh-grade classes. In 1984-85, California State University, Northridge, became a partner. Their program was funded by CAPP in 1985 and funded for 1987-88 as a dissemination project.

As in the other writing project, a major goal of this project is to teach students to revise their written text. Students are asked to write two essays -- a two-hour text-based essay and a one-hour personal essay. Both exams are scored and a reader comment is given only on the text-based essay. Where this project differs from the other is in the training of high school teachers to evaluate student essays holistically and the use of techniques for eliciting revision.

In 1985-86, the project worked with 32 eleventh-grade English teachers in 17 area high schools, primarily in the Los Angeles Unified School District, and tested a total of 522 students. Eleven lecturers from the two universities participated in the project. During 1986-87, the project worked with 31 eleventh-grade English teachers from 13 high schools, and it tested 472 students. Seven university writing faculty were involved in the project, including three as project administrators.

A new English as a Second Language (ESL) pilot-research component was added to the project in 1986-87 and drew 116 Level IV ESL students from five schools. The ESL teachers attended five more inservice sessions than did the other teachers. Those sessions involved a review of existing research on teaching language-minority students writing skills, identifying writing prompts, providing students with writing practice, and special classroom visits by university writing faculty. The ESL students' involvement differed from the other students in that (1) they wrote only the two-hour text-based essay, (2) they were given the text two days in advance of the wri-

ting examination and participated in group discussions of its content to assure that they understood the passage, and (3) they did not receive an essay score although they did receive reader comments

Partly as a result of having a special component focused on ESL students, the minority representation among participating students rose to 75 percent in 1986-87, compared to 62 percent in 1985-86

Teachers provided ethnic data on 83 percent of the participating students in 1985-86 as follows: white, 38.4 percent, Hispanic, 25.2 percent, Asian/Filipino, 22.2 percent, Black, 10.4 percent, and Pacific Islander, 3.7 percent. Almost two-thirds of the participants for whom ethnic data was available were from minority backgrounds

Project funding

Funding for the diagnostic testing projects between 1984 and 1987 is listed in Display 1 on page 6 of this report. For the 1987-90 cycle, funding is limited to the UCLA/CSU-Northridge writing project for dissemination and continuation of the Mathematics Diagnostic Testing Project

Project evaluation

One of the positive aspects of the State University's evaluation of the diagnostic testing projects is that one individual conducted the final evaluations for all three projects in 1986-87. Even though a common format was not used, data can be isolated and conclusions drawn. In addition, because two of the three projects were extensions of projects implemented and funded prior to CAPP, longer comparisons can be drawn from them.

Findings for the three projects are summarized below.

Mathematics diagnostic testing project

- The number of tests scored increased 257 percent during the initial three years of CAPP funding from 73,335 to 261,815.

- The number of university test sites increased from five to ten during that time
- Interest and involvement of the State's Community Colleges in the project has been established
- Analyses of student enrollment and performance data at 16 high schools that used project tests during the past three years showed increases in both the number of students taking three or more years of mathematics and obtaining average SAT or ACT scores
- Pre-test and post-test analyses of data from one urban school district showed no discrepancies in the tests' predictive ability between the sexes and across ethnic groups

High school diagnostic testing program in composition

- The project reached a proportionate number of minorities in the participating schools
- Students improved their writing skills by participating in the project
- Three-fourths of the participating teachers reported making teaching or curricular changes
- Although an increased number of students were served in 1986-87, only 84 percent of the anticipated 1,600 were served

Writing exam for eleventh graders

- The project had significant minority participation, in that two-thirds of the students were ethnic minority
- Teachers reported making changes in curriculum or teaching methods as a result of participation
- Students' writing skills have improved, and many will not need remedial writing courses
- The ESL component has had a significant impact on students and teachers
- Teachers who participated in the program rated all aspects of the program at 4.0 or above on a five-point scale

THE goal of the California Academic Partnership Program is to "develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college." While these cooperative efforts did occur, definitive conclusions about the success of CAPP in improving the college preparation of all of California's public school students are difficult to make at this time because of (1) the inability to isolate the impact of activities provided by CAPP from that of other educational reform efforts occurring simultaneously in the State's secondary schools, and (2) incomplete data gathered by one of the evaluators retained by the California State University on some critical aspects concerning the operations of the program.

Based on the available data about the several projects and the program as a whole during the period from Fall 1984 to Summer 1987, the Commission offers the following eight conclusions concerning the operation and impact of the program during those years.

Curriculum development projects

- 1 The 20 curriculum development projects have a mixed record of success in achieving their objectives, with some of the projects clearly outstanding, some effective, and several ineffective. The successful projects had a positive impact on students in increasing postsecondary enrollments and improving preparation for baccalaureate work.
- 2 CAPP has stimulated meaningful school and college partnerships involving the University of California, the California State University, the California Community Colleges, and independent colleges and universities in the areas of curriculum development and teacher in-service training. Replication of these partnerships in other regions of the State would be beneficial.

- 3 Effective school and college partnerships are characterized by several important elements, which were described on pages 6 and 7 of this report. The evaluation of the 20 curriculum development projects validates the importance of these elements and illustrates the particular importance of (1) mutual trust and respect among faculty and (2) the quality of the individuals, both in administrative and teaching roles, who have primary responsibility for development of the partnership roles.
- 4 While the operation of CAPP has included extensive evaluation activities, these activities have not resulted in the information necessary for drawing conclusive statements about the impact of the program in improving the preparation of students for college. The Chancellor's Office of the California State University and the CAPP advisory committee have reached the same conclusion and have devised an evaluation plan for the 1987-90 projects that will be more outcome oriented.
- 5 The direct involvement and commitment of the program advisory committee and the statewide liaison representatives have been essential to the development and implementation of the projects.
- 6 Despite some initial difficulties, the administration of the program by the Office of the Chancellor of the California State University appears satisfactory.

Diagnostic testing projects

- 7 The Mathematics Diagnostic Testing Project has demonstrated considerable success, experiencing increasing demand from mathematics teachers and secondary schools from throughout the State, and utilizing a growing share of the resources of CAPP.

8 The two diagnostic testing instruments developed in composition and writing, although effective,

do not appear to be usable statewide because of their high cost

5

Recommendations

BASED upon the analysis and conclusions presented above, the California Postsecondary Education Commission offers the following recommendations regarding the future of the California Academic Partnership Program

1. **The California Academic Partnership Program should be continued and current funding levels maintained, with appropriate cost-of-living adjustments, pending a second comprehensive program evaluation by January 1991.**
2. **Annual reports should be required of each CAPP project and a comprehensive program evaluation should be conducted prior to January 1991, and every third year thereafter, by the Office of the Chancellor of the California State University. The report of this comprehensive evaluation should be submitted to the Legislature, the Governor, and the Postsecondary Education Commission, and the Commission should review and comment on these evaluations as appropriate.**
3. **The design for the comprehensive program evaluation should be jointly developed by the California State University, the California Postsecondary Education Commission, and the CAPP advisory committee. The evaluation should be outcome oriented and should include a follow-up study to determine the ongoing impact of CAPP on students, teachers, and the curriculum.**
4. **The present administration of CAPP by the California State University as an intersegmental program should be continued.**
5. **The Mathematics Diagnostic Testing Project should be funded by the Legislature and Governor for implementation on a statewide basis with test materials and scoring services available to all California mathematics teachers in secondary schools and Community Colleges who request them. Staff of the State University's Office of the Chancellor should work with the Intersegmental Budget Committee to develop and submit to the Department of Finance budget requests for the Mathematics Diagnostic Testing Project as well as the California Academic Partnership Program for inclusion in the 1989-90 budget.**
6. **CAPP project staff and participants should be encouraged, supported, and expected to make presentations at appropriate curriculum and professional workshops and conferences for both schools and colleges, in order to disseminate project information on intersegmental approaches to enhance the preparation of secondary school students for college.**

Appendix A

Assembly Bill 2398 (1984)

Assembly Bill No. 2398

CHAPTER 620

An act to amend Sections 11000, 11001, 11002, 11003, 11004, and 11005 of the Education Code, relating to schools, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor August 14, 1984 Filed with
Secretary of State August 15, 1984.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2398, Hughes. California Academic Partnership Program

Existing law authorizes the establishment of the California Academic Partnership Program, to be administered by the Trustees of the California State University for the purpose of providing academic and counseling services to pupils enrolled in grades 7 to 12, inclusive, and to increase the involvement of postsecondary educational institutions to improve the academic quality of public postsecondary schools. Existing law prescribes procedures for the establishment of an advisory committee for the purpose of making recommendations to the Chancellor of the California State University for the award of grants to projects submitted by qualified applicants in accordance with prescribed criteria to implement these provisions of existing law.

This bill would make substantial revisions to the provisions of existing law governing the administration of the California Academic Partnership Program.

This bill would require the program to be administered by the Trustees of the California State University, in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the Superintendent of Public Instruction. This bill would state that the purpose of the program is to develop cooperative efforts to improve the academic quality of the public secondary schools with the objective of improving the preparation of all students for college. This bill would specify that projects funded under the provisions of this bill may address improvements in secondary school curriculum and the ability of students to benefit from these improvements.

This bill would revise the provisions of existing law governing the composition of the advisory committee appointed to assist in the selection of proposals to be funded and the development of criteria for project evaluation, as prescribed. This bill would require the advisory committee to make recommendations regarding the development of criteria for identifying projects which are ineffective, and for the development of options identifying additional resources and efforts which promote the objectives of the program.

This bill would substantially revise eligibility criteria for the submission of funding for a project grant, as prescribed. This bill would require each project receiving a grant to provide matching funds, rather than an equal dollar amount of matching funds, from existing funds received from federal, state, local, or private sources. This bill would revise the priorities for the award of project grants.

This bill would require the Chancellor of the California State University, with the assistance of the advisory committee, and the advice of faculty from appropriate disciplines, to establish a voluntary cooperative program for the academic assessment of secondary school students in the state, as prescribed.

This bill would require the California Postsecondary Education Commission to provide a progress report on the effectiveness of the California Academic Partnership Program to the Legislature on or before January 1, 1986, and would require the commission to submit a final evaluation on or before January 1, 1988, as prescribed, and would authorize the commission to identify projects which are ineffective or not cost-effective for termination.

This bill would take effect immediately as an urgency statute.

The people of the State of California do enact as follows.

SECTION 1 Section 11000 of the Education Code is amended to read.

11000 There is hereby established the California Academic Partnership Program, to be administered by the Trustees of the California State University, in cooperation with the Regents of the University of California, the Board of Governors of the California Community Colleges, and the Superintendent of Public Instruction. The purpose of the program shall be to develop cooperative efforts to improve the academic quality of public secondary schools with the objective of improving the preparation of all students for college. Projects funded under the provisions of this chapter may address improvements in secondary school curriculum and the ability of students to benefit from these improvements. Academic partnership projects shall be distributed throughout the state in order to provide schools located in rural, urban, and suburban areas with access to these services.

SEC. 2. Section 11001 of the Education Code is amended to read.

11001. The Chancellor of the California State University shall establish an advisory committee to assist in selecting proposals to be funded and developing criteria for project evaluation. The committee shall be composed of the following members:

(a) Two certificated secondary school teachers, including at least one junior high or intermediate school teacher, appointed by the Superintendent of Public Instruction.

(b) Two certificated secondary school employees with responsibility for curriculum administration, appointed by the

Superintendent of Public Instruction

(c) One director of a regional consortium participating in the California Student Opportunity Access Program established pursuant to Chapter 113 of the Statutes of 1978, appointed by the Student Aid Commission

(d) Two representatives of the California Community Colleges, to be appointed by the Chancellor of the California Community Colleges, at least one of whom shall be a faculty member.

(e) Two representatives of the California State University, to be appointed by the Chancellor of the California State University, at least one of whom shall be a faculty member

(f) Two representatives of the University of California, appointed by the President of the University of California, at least one of which shall be a faculty member

(g) One representative, appointed by the Director of the California Postsecondary Education Commission

Faculty appointments to the advisory committee shall be made by the appropriate appointing authority through consultation with the faculty senate

SEC. 3 Section 11002 of the Education Code is amended to read: 11002. The advisory committee shall make recommendations regarding all of the following:

(a) Development of criteria for awarding grants pursuant to Section 11003

(b) Development of criteria for determining the priority ranking of schools selected to receive assistance under the California Academic Partnership Program.

(c) Development of criteria for identifying projects which are ineffective

(d) Development of options identifying additional resources and efforts which promote the objectives of the program.

(e) Development of a general policy for cooperative diagnostic testing of secondary students with assessment instruments commonly used by California postsecondary educational institutions.

SEC 4. Section 11003 of the Education Code is amended to read:

11003. (a) A school district together with a postsecondary educational institution or a consortium of postsecondary educational institutions may submit a joint application to the Chancellor of the California State University for a grant to fund a project intended to improve student performance in secondary schools. The advisory committee shall give consideration to the following, in addition to its own criteria for the recommendation of programs for funding.

(1) The inclusion of a comprehensive plan for curricular revision or enhancement and instructional change

(2) The participation of postsecondary campus faculty working as equal partners with secondary school teachers in efforts to improve the academic quality of college preparatory instruction

(3) The provision of activities and services designed to enhance

the ability of students to benefit from college preparatory curricula

(4) The provision of in-service training designed to increase college aspirations of students from groups with low participation rates in postsecondary institutions

(5) The inclusion of procedures for the independent evaluation of the program budget.

(6) Plans for the participation of more than one secondary school

(7) Plans for the inclusion of intermediate or junior high schools in the project

(8) Plans for the continuation of the project after funding ceases.

(b) Upon receipt of an application submitted pursuant to subdivision (a), the Chancellor of the California State University may award a grant to the joint applicants for purposes of funding the proposed project. Each project which receives a grant pursuant to this subdivision shall provide matching funds from existing funds received from federal, state, local, or private sources or budget increases in those funds, with preference to projects which have the strongest demonstrated institutional commitment. Priority shall be given to projects which serve either of the following:

(1) Schools and school districts utilizing the provisions of Article 4 (commencing with Section 54700) of Chapter 9 of Part 29

(2) Schools with low student participation in institutions of postsecondary education or with a concentration of students from groups which are underrepresented in postsecondary education, affording priority to those applicants in inverse order of their level of student participation in institutions of postsecondary education authorized to award baccalaureate degrees

(c) The Chancellor of the California State University, with the assistance of the advisory committee established under Section 11001, and with the advice of faculty from appropriate disciplines, shall establish a voluntary cooperative program for the academic assessment of secondary school students in the state. In developing this system, the chancellor shall take steps necessary to ensure that increased uses of assessment instruments assist in all of the following

(1) Reducing the demand for remedial programs at the postsecondary level.

(2) Analyzing student readiness for college-level work

(3) Identifying the academic needs of students for secondary school teachers and counselors

(4) Encourage and give priority to schools identified in paragraph

(2) of subdivision (b) of Section 11003 for the utilization of these instruments

SEC. 5. Section 11004 of the Education Code is amended to read

11004 The California Postsecondary Education Commission shall provide a progress report on the California Academic Partnership Program to the Legislature on or before January 1, 1986, and a final evaluation report on or before January 1, 1988. The evaluation shall include, but need not be limited to, indicators of increases in the

number of students enrolled in postsecondary educational institutions, indicators of students' improved preparation for baccalaureate work, reductions in dropout rates, and the assessment of the effectiveness of the program by participating school districts and postsecondary institutions, together with recommendations from the commission for the improvement of the program.

SEC 6. Section 11005 of the Education Code is amended to read:

11005. Based upon evaluations conducted pursuant to Section 11004, the California Postsecondary Education Commission may identify projects which are ineffective or not cost-effective for termination. Funds made available as a result of that termination shall be reallocated for the awarding of new grants pursuant to Section 11003.

SEC 7. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to ensure that the selection processes and criteria prescribed in this act will be implemented for the California Academic Partnership Program for the 1984-85 school year, it is necessary that this act take effect immediately.

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Appendix B

Project Descriptions

CURRICULUM DEVELOPMENT PROJECTS FUNDED IN 1984-1987

1. FIVE STAR ACADEMIC PARTNERSHIP

Project partners

Fillmore Unified School District
Norwalk-La Mirada Unified School District
University of California, Los Angeles
University of California, Santa Barbara

This project of the Fillmore Unified and the Norwalk-La Mirada Unified School District, in cooperation with the University of California campuses at Santa Barbara and Los Angeles, addresses two audiences -- underrepresented students in grades six through twelve, and teachers of mathematics and science. The project focuses on curriculum development and change in these two areas by (1) giving teachers opportunities to learn more about the content areas and (2) giving teachers opportunities to explore interactive instructional and learning methods.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$41,000 in matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$43,000 from CAPP and \$76,000 in matching funds. Funding for the 1985-1987 fiscal year was \$34,400 from CAPP funds and \$82,000 matching funds.

Curriculum areas: Mathematics and science; with an emphasis on how teachers view their own instructional role in these curricular areas; the nature of student teacher interactions; and illustrations of how scientists and mathematicians think.

Direct participants: Teachers on a voluntary basis, as follows:

Fillmore: 20-25 junior and senior high school mathematics and the same number of science teachers, plus four administrators.

Norwalk-La Mirada: 30 high school mathematics and 30 science teachers.

University of California, Los Angeles: one biology professor as a consultant.

University of Santa Barbara: one mathematics professor as a consultant.

Grade levels: Fillmore: sixth through twelfth grades; Norwalk-La Mirada: seventh through twelfth grades. Both districts have included, at district expense, teachers from grades K-5/6 who wished to participate in the project activities, including the voluntary Math and Science Support Groups.

Primary methods: Monthly one-day or half-day Math and Science Support Group meetings during the school year to discuss instructional techniques and to plan future inservice activities, with a culminating five-day summer inservice institute-retreat during both the first and second project years. In addition, the science teachers held a mid-year weekend institute-retreat at the UCLA campus during the second project year. The mathematics teachers held an early-summer curriculum development workshop between the first and second project years. During the third project year, a joint Math/Science three-day summer institute/retreat was held to help teachers integrate their math and science curricula and instructional activities. Students in the twelfth grade have been identified for longitudinal follow-up in postsecondary education.

2. A JUNIOR MESA PROGRAM FOR RURAL AND METROPOLITAN STUDENTS

California State College, Bakersfield
Arvin Union Elementary School District
Bakersfield City Elementary School District
Bakersfield College
Earlment Elementary School District
Fairfax Elementary School District
Kern High School District

This Kern and Tulare Counties partnership project is a modified version of the successful MESA senior high school program. It targets students for special services, such as tutoring and counseling, in order to improve their academic performance in science and mathematics courses.

Funding: Funding for the first six months of 1985 included \$31,996 from CAPP and \$60,000 matching funds from the districts and institutions. Funding for the 1985-86 fiscal year included \$70,000 from CAPP and \$220,000 in matching funds. Funding for the 1986-87 fiscal year was \$56,000 from CAPP funds and \$232,000 matching funds.

Curriculum areas: Mathematics, science, and English, with an emphasis on direct tutorial assistance including motivational counseling, study-skills development, and enrichment support for identified students.

Direct participation: Black, Hispanic, and American Indian students who meet the following criteria: (1) a standardized test score (CAT) of at least the 60 percentile or strong teacher

recommendation, (2) member of a targeted ethnic group (Black, Hispanic, American Indian, Puerto Rican), (3) Interest in math and science as determined from a student interest survey and, (4) a grade point average of at least 2.0 (C).

By the end of the 1985-86 school year, the project had enrolled 343 students from all 12 junior high and upper elementary schools in the seven districts. A one-week summer enrichment program attracted 68 students. A total of 64 students completed the program.

Grade levels: The project serves seventh and eighth graders who will feed directly into the existing MESA program (not funded by CAPP). This includes the Kern Union High School District and the Delano Joint Union School District.

Primary Methods: Academic tutoring, independent study groups, summer enrichment programs, counseling, field trips, awards, teacher training, curricular enhancement and parent involvement.

Other objectives: Identification of teams of four teacher/counselor advisors at each junior high school who receive support and inservice training. Tutors from colleges and high schools are selected and provided with training.

3. ETHNIC LITERATURE -- A MODEL FOR TEACHING CRITICAL THINKING SKILLS

Participants:

California State University, Sacramento
Grant Unified High School District

In this project of the Grant Union High School District and the California State University, Sacramento, ethnic literature serves as a curricular model for teaching critical thinking skills to students from two middle schools and the high school. Faculty from the district and the university jointly developed curriculum and testing instruments.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$37,000 matching funds from the districts and institutions. Funding for the 1985-86 fiscal year included \$53,375 from CAPP and \$69,000 in matching funds.

Curriculum areas: English, with an emphasis on "critical thinking skills."

Direct participants: About 150 students, primarily minority, were enrolled in the project classes during the 18 months of the project's life. Three teachers, one from each of the three project schools, participated in the project. A CAPP project class was

selected by the teachers from one of five classes they taught. Three university professors were regularly engaged in developing curriculum materials, giving students lessons, and working with the three classroom teachers. In addition to the three university faculty, seven other CSUS faculty members participated as inservice workshop presenters and lecturers to classes during campus visits. A majority of the participating project faculty were minority members themselves, representing both Black and Hispanic ethnic groups. A three-day invitational writing camp was conducted at CSUS in August 1985. Sixteen students were invited and 14 attended. The group was evenly split between males and females between minority and majority ethnic groups.

Grade levels: One gifted class, eighth grade-ninth grade combination; one ninth grade class, and one tenth grade class. Participants from the two middle schools feed into Grant High School.

Primary methods: Model lessons given by university faculty, compilation of curriculum materials to create instructional units, tutoring by high school peer mentors and university students, and summer writing camp.

Other objectives: Frequent planning and review meetings with representatives from the institutions (three teachers, school administrators, and California State University, Sacramento faculty members and EOP and outreach staff).

4. LANGUAGE ACROSS THE CURRICULUM: "LEARNING FROM TEXT"

Participants:

California State University, Northridge
Los Angeles Unified School District

The focus of this project of Cleveland Senior High School, Sutter Junior High School, and California State University, Northridge, is to improve the instruction of language across the curriculum through team teaching and the sharing of teaching methodology from university professors to high school teachers to college students.

Funding: Funding for the first six months of 1985 included \$30,000 from CAPP and \$43,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$62,120 from CAPP and \$85,000 in matching funds. Funding for the 1986-1987 fiscal year was \$48,004 from CAPP funds and \$91,000 matching funds.

Curriculum areas: Reading comprehension and vocabulary skills through subject areas of social studies, English, science, mathematics, and English as a second language.

Direct participants: 16-20 teachers in 1985-1986 from each of the five curricular areas listed above. The project director reported

that approximately 540 students were served each semester in 1985, 185-925 Cleveland students and 410-1050 Sutter students in 1986.

Grade levels: Sixth through twelfth grades.

Primary methods: Three-day summer inservice workshop, periodic planning and follow-up meetings, and demonstration lessons by California State University, Northridge faculty.

Other objectives: Participating teachers became "master" teachers and helped train other teachers in the second and third years. The project sought to improve students' attitudes toward reading and provide them with realistic assessment of college options and prerequisites. It also produced numerous articles and presentations for professional educators, jointly presented by school-college faculty.

5. ACADEMIC PARTNERSHIP TO IMPROVE SOCIAL STUDIES CURRICULUM

Participants:

Sonoma State University
Cotati-Rohnert Park University School District

Jointly sponsored by the Cotati-Rohnert Park University School District and Sonoma State University, this project served as a pilot site for the development of new curriculum units that could be disseminated to small high schools (100-400 ADA) within the University's service area. The curriculum development was designed for special units of geography and economics in order to meet the requirements for social studies included in the Hughes-Hart Educational Reform Act of 1983 (SB 813): American History/Geography and American Government, Civics and Economics.

Funding: Funding for the 18-month project beginning in January 1985 and ending in June of 1986 included \$30,995 from CAPP, and \$8,000 from matching funds.

Curriculum areas: American history and geography; American government, civics, and economics. Emphasis on restructuring existing history and government courses by infusing units of geography and economics to match the state's curriculum standards.

Direct participants: Four classes of 12th grade American government, seven classes of 11th grade U.S. history, and one class of 9th grade world history for a total of 235 students. Participating students were "mixed, heterogeneous, and some college bound and some not." Three to four high school teachers and four to five university professors were involved in the project. During 1985-86, dissemination of project developed material was presented to various groups of teachers through (1) three workshops which included 50 high school teachers from 30 schools; (2) a three-day institute which drew 27 high school teachers from 19 schools, and

59 elementary teachers from 50 schools (representing all six counties in Sonoma State University's service area); and (3) lesson demonstrations at Stanford University which attracted 40 teachers from 10 counties in the state.

Grade levels: Ninth, eleventh, and twelfth grades.

Primary methods: Progressive development, presentation, and revision of instructional units through planning sessions of three-member teams of university faculty and secondary school teachers and pilot presentations by team members.

6. HIGH SCHOOL/COLLEGE PARTNERSHIP PRODUCES PREPARED STUDENTS

Participants:

Sacramento City College
Sacramento City Unified School District

The Sacramento Unified School District and Sacramento City College worked together with students in grades seven through twelve to increase their knowledge about and preparedness for college, using aptitude and placement testing, and intensive academic counseling for students and their parents. Secondary school teachers participate in an inservice training program on curriculum development.

Funding: Funding for the first six months of 1985 included \$20,000 from CAPP and \$96,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$50,285 from CAPP and \$195,000 in matching funds. Funding for the 1986-1987 fiscal year was \$40,025 from CAPP funds and \$212,000 matching funds.

Curriculum areas: English, mathematics, science, social science, and English as a second language (ESL).

Direct participants: During 1985-86, 1,500 middle school students were given half-day tours of the City College (80 students at a time throughout the year). Beginning in the summer of 1986, 56 middle school students who had toured the community college participated in a 4-233k summer program call the Early Start Program (ESP). Middle school counselors identified potential participants and sent them invitations. About 85% of the students are described as coming from AFDC families: 40% are Black, and 22% are Hispanic.

Grade levels: Seventh through twelfth.

Primary methods: One-day teacher inservice workshops, direct instruction to selected students on college admissions test-taking, planning meetings for teachers by content areas, and dissemination of the articulation council model.

Other objectives: Informational mailings to high school parents concerning college entrance and preparation; middle-school student tours of the Sacramento City College campus; inservice development of middle-school counselors; and internal and external publicity.

**7. PROJECT STEP - STUDENT/TEACHER EDUCATIONAL PARTNERSHIP:
A MODEL FOR INTERSEGMENTAL COOPERATION**

Participants:

University of California, Irvine
Santa Ana Unified School District
California State University, Fullerton
Rancho Santiago College
Chapman College

Through a series of forums and workshops on curriculum development, and inservice training for secondary school teachers and university faculty, this project focuses on teaching problem solving and higher order thinking skills across the curriculum. Tutorials are provided to students.

Funding: funding for the first six months of 1985 included \$37,450 from CAPP and \$27,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$71,487 from CAPP and \$50,000 in matching funds. Funding for the 1986-1987 fiscal year was \$60,766 from CAPP funds and \$50,000 matching funds.

Curriculum areas: Reading, writing, mathematics, and science, with an emphasis on teaching problem solving and higher-order thinking skills.

Direct participants: For 1985-1986, 680 students from the seven intermediate schools participated, and 1,561 students from three high schools participated in support services. Student selection is either through full class participation in a project teacher's classroom or, for individualized student activities (tutoring and special student programs), through self-selection or nomination by counselors and teachers. Thirty-five faculty members from the three postsecondary institutions also participated.

Grade levels: Grades 6-12.

Primary methods: Forums and workshops for curriculum development and inservice training, with student tutoring in mathematics and reading.

This project was selected as a Showcase Project for 1987-1990.

8. ACADEMIC PARTNERSHIP

Participants:

Pajaro Valley Unified School District
University of California, Santa Cruz

This project, conducted by the Pajaro Valley Unified School District and the University of California, Santa Cruz, is concentrated in one school -- Watsonville High School, which enrolls a large proportion of ethnic minority students (61% Hispanic enrollment). Services are also provided to three feeder junior high schools. This project is designed to motivate students to take and succeed in courses which will prepare them for a postsecondary education. In addition to improving the school's curriculum, the project sponsors inservice training for teachers, tutorial assistance for students, and a "Saturday Science and Mathematics Academy" for seventh- and eighth-grade students and a ten day Summer Science and Mathematics Academy for high school students.

Funding: Funding for the first six months of 1985 included \$32,000 from CAPP and \$59,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$49,145 from CAPP and \$113,000 in matching funds. Funding for the 1986-1987 fiscal year was \$40,000 from CAPP funds and \$114,000 matching funds.

Curriculum areas: Biology, marine science, earth science, physics, and mathematics.

Direct participants: (1) The Summer Science and Mathematics Academy has provided an excellent science opportunity for approximately 20 academically promising ninth and tenth grade students who have not yet enrolled in biology. Students are identified and nominated by teachers for this ten-day program at the University of California, Santa Cruz campus. In 1985, eight of the 18 students in the program had Spanish surnames and two had Asian surnames. As part of the Summer Science Academy, approximately 11-12 UCSC professors and scientists make presentations and work with the students. There are also two high school teachers who participate as mentors, one in science and the other in mathematics. (2) the Saturday Science and Mathematics Academy is for seventh and eighth grade students from Watsonville High School's three feeder junior high schools. Students visit the UC Santa Cruz campus for a day-long educational program conducted by university faculty and graduate students. (3) The Learning Assistance Program provides regular tutorial meetings for tenth, eleventh, and twelfth grade students enrolled in advanced mathematics and physical science courses. Students are referred to the program by either instructors, counselors, parents, or the university program supervisor.

Grade levels: Distinct activities for students in grades seven through twelve.

Primary methods: Direct instruction of students in academies and field trips related to the curriculum development. Also inservice programs for teachers.

Other objectives: Cross-age tutoring and counselor training.

This project was selected as a Showcase Project for 1987-1990.

9. PREPARING STUDENTS FOR UNIVERSITY-LEVEL ACADEMIC WRITING

Participants:

Montebello Unified School District
University of California, Los Angeles

This project targeted minority students in grades seven through eleven who have potential for success in college, but who have not necessarily been in a college-bound program. Project teachers participate in a staff development program which focuses on special writing instruction for targeted students. Students in the project had the opportunity to visit the University of California, Los Angeles campus, send their writing samples to the university for review and comment by faculty, and to take the UCLA Freshman Writing Exam while in eleventh grade. Teachers in the program also produced a textbook on writing entitled, *Masters of Words. Makers of Meaning.*

Funding: Funding for the first six months of 1985 included \$27,124 from CAPP and \$27,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$62,500 from CAPP and \$56,000 in matching funds. Funding for the 1986-1987 fiscal year was \$53,368 from CAPP funds and \$51,000 matching funds.

Curriculum areas: Writing, with an emphasis on critical thinking skills and clear written expression.

Grade levels: Seventh, ninth, and eleventh.

Primary methods: Teacher inservice development through bi-weekly and tri-weekly meetings.

Other objectives/methods: Counseling to enhance each student's self-image, raising of college awareness through presentations by UCLA personnel, and testing.

10. THE QUANTITATIVE EDUCATIONAL DEVELOPMENT PROJECT

Participants:

San Diego City Schools
San Diego County Consortium

Other objectives: Students are pre- and post-tested, and their progress is monitored through a series of mastery learning units in the Achievement Goals Program (AGP) developed by the district. Students who do not achieve mastery (defined as correctly answering

Primary methods: Demonstration lessons, team-teaching, curriculum development, and tutorial and skill-development assistance by university students.

Grade level: Eighth.

Curriculum areas: Science, with attention to reading, writing, and computation skills within the context of the science curriculum. Direct participants: Students and teachers: nine science teachers and approximately 1,000 eighth grade students; approximately 50 students in the after-school program. Nearly half the students at Kellier Middle School are Black (47%), 31.4% are white, 12.8% are Hispanic, 6.9% are Asian/Pacific, and 0.4% are American Indian. Five University of the Pacific professors are the main postsecondary participants. College students serve as tutors for the project.

Funding: Funding for the first six months of 1985 included \$34,676 from CAP and \$32,000 matching funds from the districts and institutions. Funding for the 1985-1986 fiscal year included \$40,243 from CAP and \$63,000 in matching funds. Funding for the 1986-1987 fiscal year was \$37,850 from CAP funds and \$75,000 matching funds.

This project works with three junior high schools -- two in the San Diego City Schools and one in the Cajon Valley Union School District. The three schools are composed predominantly of ethnic minority students. The purpose of the project was to strengthen the students' curriculum, the quality of instruction, and the students' motivation by offering three types of services to teachers and students: (1) Integrating skill development through introduction of scientific facts and procedures, the materials and lesson plans to help teachers develop reading, writing, computation, and critical thinking skills while building the students' proficiency in science. (2) Providing new science teachers with University faculty and basic skills specialists to build their professional skills. The specialists also work with experienced teachers in order to help them apply and elaborate on innovative instructional methods; and, offering after-school tutoring and counseling to promising students who are having difficulty mastering science concepts and activities. The project also provides proficiency and aptitude measurements in order to contribute to the student's intellectual and emotional growth. In 1986-1987, the project developed a video for use in neighborhood meetings. The video will provide the foundation for discussion in those meetings. The meetings, which are direct to parents, are intended to provide parents with an understanding of both the challenges and rewards which college preparation offers. The project targets all eighth grade students.

Direct participants: Students were identified by project staff on the basis of performance on district administered standardized tests and from recommendations from counselors and teachers. In 1985-86, 227 students were served by the project. There were 71 eighth grade students, 78 seventh grade students and 78 sixth grade students who participated in the 1986 summer session. The ethnic composition of those participants is: American Indian - 1%, Black - 4%, and Hispanic - 95%. For 1986-87, students (grades 7, 8, and 9) meeting the selection criteria included 84 from La Cumbre Junior High School, 86 from Santa Barbara Junior High School, and 46 from Santa Barbara High School. An additional 80 sixth grade

Curriculum areas: Mathematics and language arts.

matching funds.

Funding: Funding for the first six months of 1985 included \$20,000 from CAP and \$28,000 matching funds from the districts and institutions. Funding for the 1985-196 fiscal year included \$37,452 from CAP and \$33,000 in matching funds. Funding for the 1986-1987 fiscal year was \$33,703 from CAP funds and \$33,000

admissions process.

The LINK project targeted ethnic minority students in junior and senior high school who were identified as having "good academic potential." The students initially selected for the program were in a "head start" summer school. The summer school emphasized reading, writing, mathematics, keyboard/word processing, science, art, and selected enrichment activities, such as: library use, music, drama, and sports. The students received the support of a teacher/liaison during both junior and senior high school. For high school students in the program, a six-week preparation for college admissions testing was provided. The teacher/liaison monitored student progress, maintained contact with parents and teachers, and provided structured tutorial services for the students. There were also activities designed to prepare students, both academically and socially, for their transition from junior to senior high school. As part of the high school program, classes were offered which focused on preparing students for college admissions tests. Workshops and seminars were provided during the year to inform parents and students regarding the college admissions process.

Santa Barbara High School District
University of California, Santa Barbara
Santa Barbara Community College

Participants:

EDUCATION

11. LINKING RESOURCES FOR STUDENTS UNDERREPRESENTED IN HIGHER

80% of the test items associated with each unit) leave their elective classes or supplemental activities and receive additional "reinforcement" instruction until they attain mastery.

students were identified each spring. Twelve school district teachers directly participated in the program with approximately 45 additional teachers interacting with the teacher/liaisons. Seven UC Santa Barbara professors, staff and students, and four faculty from Santa Barbara Community College participated in the project.

Grade levels: Sixth, seventh, and eighth.

Primary methods: A liaison teacher works with and advises students and oversees paid tutors; home visits are conducted for parent involvement and teacher education; and, a four-week summer "head start" for junior high is offered to incoming seventh grade students with academic potential.

Other objectives/methods: Career awareness and value clarification study groups; research conducted by UCSB staff to assess parent/student knowledge of the college admissions process; on-going UCSB involvement in curriculum work and evaluation.

12. MATHEMATICS: NEW COURSES IN THE 9-12 ACADEMIC PREPARATION SEQUENCE

Participants:

University of California, Davis
California State University, Sacramento
San Juan Unified School District
Sacramento Unified School District
Grant Joint Unified School District
Elk Grove School District

This project focused on curriculum writing and the piloting of two new math courses, one at the seventh and eighth grade levels and the other at the twelfth grade level. The initial high school course was split in two; one course for those students who had completed geometry, and the other for those who had taken advanced algebra.

Funding: Funding for the first six months of 1985 included \$29,404 from CAPP and \$23,000 matching funds from districts and institutions. Funding for the 1985-1986 fiscal year included \$58,500 from CAPP and \$28,000 in matching funds. Funding for the 1986-1987 fiscal year was \$47,000 from CAPP funds and \$29,000 matching funds.

Curriculum areas: Mathematics and problem solving.

Direct participants: Forty-four teachers (of whom CAPP supports 27 and the district supports 17), with the CAPP teachers including ten from the San Juan Unified School District, eight from the Sacramento Unified School District, six from the Grant Unified School District, and three from the Elk Grove Unified School District. In 1985-86, approximately 191 twelfth grade and 533

seventh-eighth grade students were in pilot classes taught by project teachers. Over 80% of the 12th grade students and 40% of the seventh-eighth grade students in pilot classes were from the San Juan Unified School District schools. Faculty members from the University of California, Davis, and the California State University, Sacramento, also participated.

Grade levels: Seventh, eighth, and twelfth.

Primary methods: Three to four all-day workshops, bi-monthly resource meetings, one- and two-week summer sessions of course writing, and classroom field testing in 1985-1986.

Other objectives/methods: Guest presentations by visiting mathematics experts.

13. ACADEMIC PARTNERSHIP TO IMPROVE COLLEGIATE PREPARATION

Participants:

University of California, Los Angeles
Los Angeles Unified School District
Los Angeles Harbor Community College

This project was designed to extend and update curriculum revision, provide for curriculum and counseling services with the junior high schools and Harbor College, and to provide other direct services to teachers and counselors in the form of workshops to students through counseling and tutorial services and diagnostic testing and placement assistance. The project identified several outcomes they expected to accomplish in meeting their goal of "clearing the obstacles that inhibit ready access to postsecondary education and to provide a flow of information among Banning High School, Harbor College, and UCLA." Those outcomes were: (1) Inter-institutional curricular continuity in mathematics, writing, and science as well as vertical and horizontal articulation of the curriculum within the secondary institutions. (2) Improved student performance in the target area. (3) Better understanding of the interactions between teaching practices, testing, and student performance. (4) Enhanced tutoring and counseling coordination among the institutions. (5) Development of a core curriculum/placement model. (6) Dissemination of information about the program as an inter-institutional curriculum continuity model.

Funding: Funding for the first six months of 1985 totaled \$20,000 from CAPP and \$24,000 in matching funds. Funding for the 1985-86 fiscal year included \$50,988 from CAPP and \$38,000 in matching funds. Funding for the 1986-87 fiscal year included \$40,765 from CAPP and \$40,000 in matching funds.

Curriculum areas: Mathematics, writing, and science, with a focus on inter-institutional curricular continuity in each area from high school to community college to university.

Direct participants: The total student population at Banning High School (2,800 students) and three junior high schools: Carnegie, Curtiss, and Wilmington (4,400 students) were essentially the target population. The main target population consisted of 200 magnet school students and 800 Banning High School students participating in the Core Curriculum program. These students were identified as having the potential for success in college.

Sixty-two teachers from the four secondary schools (23 English, 16 science, 14 math, and 9 social studies) out of 350 certified teacher were active in the project. In addition, 13 counselors and the librarian from Banning High School and 17 counselors from the three junior high schools also participated (8 from Wilmington, 5 from Curtiss, and 4 from Carnegie). The postsecondary component consisted of 6 faculty and 3 counselor/administrators from Harbor College, and 4 faculty and 2 administrators from UCLA.

Grade levels: Junior high school through twelfth grade:

Primary methods: Workshops, monthly counselors' colloquia, counseling and testing.

14. COLLEGE ASPIRATION PARTNERSHIP PROGRAM

Participants:

ABC Unified School District
University of California, Irvine
Cerritos College

The College Aspiration Partnership Program focused on the identification, academic preparation, and support of students from groups that are underrepresented in postsecondary education. Intersegmental team teaching was used to produce a "fully articulated curriculum" in mathematics and English. Students from underrepresented ethnic minority groups were targeted to receive peer counseling as well as tutoring to improve their potential to enroll and persist in postsecondary education.

Funding: Funding for the 1985-86 fiscal year included \$62,517 from CAPP and \$198,000 in matching funds. Funding for the 1986-87 fiscal year included \$50,014 from CAPP and \$198,000 in matching funds.

Curriculum areas: English and mathematics.

Direct participation: During the first year of the project (1985-86), there were 99 junior high and 283 high school students participating. In the second year, 118 junior high and 539 high school students participated in the project.

Students were identified through a computer search of grades 7-12. The computer search identified those students whose GPAs were

between 2.0 and 4.0 and were defined as "underrepresented" (Black, Hispanic, American Indian, or Asian).

Eleven teachers, one from each of the participating schools were involved in the project as "teacher-advisors." The "Articulation Faculty" for English included five other teachers from two of the junior high schools and three from the high schools. The "Math Articulation" team consisted of 10 teachers, eight from the high schools and two from the junior high schools. Seven tutors, all of whom had passed the district's instructional aides' examination, participated in the project.

Four English department faculty and two math department faculty from UC Irvine participated in the project as well as 15 program and student support directors and staff who contributed to the project. Two English department instructors and one math department instructor from Cerritos College participated in the project's articulation efforts.

Grade levels: Seventh through first year of college.

Primary methods: Student tutoring, parent conferences, guest speakers, workshops and study groups, counselor mini-conferences, celebrations, and field trips to university campuses. The project director's report noted that "the participating schools with the highest degree of success as measured by student attendance at CAPP meetings were those which: (1) the counselor contacted each student and the student's parent(s) by telephone. (2) The teacher-advisor established regular meeting times. (3) The counselor and teacher advisor reviewed with the students and their parent(s) the criteria for selection for participation in the project. (4) The teacher did a survey of college bound needs/preferred activities with the students and was able to begin implementing some of those activities.

The least successful were those CAPP groups that emphasized the tutorial aspects of the program without instilling in the student sense of being part of an elect group which other might want to emulate or join. Chartered CAPP clubs were organized with CAPP T-shirts, bonding exercises and student services and conference guidance (three separate conferences) all of which "served to create a good cohesiveness."

15. THE MATHEMATICS AWARENESS AND SKILL DEVELOPMENT PROGRAM

Participants:

South Coast EOPS Consortium
Whittier Unified High School District
California State Polytechnic University, Pomona
Rio Hondo Community College
Whittier College

This project targeted students enrolling in five pre-algebra and

algebra courses at Pioneer High School. These courses were identified as the critical preparatory courses that determine whether students can continue to take the sequence of math courses necessary for college. The courses are generally taken in the first two years of high school, enough time to help students while they are still in high school. The project actually served students enrolled in eight courses, including one section of calculus, three sections of introduction to algebra, three sections of algebra I, and one special class of students who failed or received Ds in the first semester of algebra I.

Funding: Funding for the 1985-86 fiscal year included \$40,000 from CAPP and \$140,000 in matching funds. Funding for the 1986-87 fiscal year included \$32,000 from CAPP and \$118,000 in matching funds.

Curriculum areas: Mathematics.

Direct participants: Pioneer High School (the main target site) has the largest proportion of Hispanic students (74%) and the smallest proportion of White Students (21%). The proportion of Hispanic students receiving tutoring in 1985-86 was 79%; Whites, 16%; and Asian/Filipino, 5%.

Four teachers taught eight courses and sections utilizing 11 student tutors; four from Whittier College, three from Rio Hondo Community College, one from Cal Poly, and the remainder from Pioneer High School. Two faculty members from Whittier College team taught the calculus class with one of the high school teachers. Sixteen other personnel are listed by the project as participants representing all of the partnership institutions. Most of the 16 members are part of the project's Academic Advisory Team which "has the responsibility of recommending and implementing curriculum development revision."

Grade levels: Ninth through twelfth grades.

Primary methods: The project utilizes the following methods to help the students and teachers involved in the project:

- (1) Tutorial/Instructional Aides, from schools represented by the partners, (to) assist high school teachers in class, tutor after school, and maintain a tutorial lab open one night per week.
- (2) An Academic Advisory Team composed of secondary and postsecondary faculty (to) review mathematics curriculum and teaching methodology.
- (3) Guest lecturers from colleges or universities (to) make presentations on subjects related to applications of math in settings which will stimulate students' interests and motivation for learning mathematics.
- (4) Inservice training activities to meet the specific needs of secondary math faculty.

16. THE COLLEGE PREPARATORY TUTORIAL CENTER PROJECT

Participants:

California State University, Dominguez Hills
Centinela Valley Unified School District
El Camino Community College

Students in this project were involved in computer-assisted instruction in mathematics and English before and after school. Students from the community college and high school project site (Leuzinger High School) provide additional tutorial assistance to project student participants.

Once the students reached the twelfth grade and had mastered basic skill objectives, they became eligible to participate in an internship program through Northrup Corporation. The internship program was seen as a way of exposing students to careers requiring a postsecondary education.

Funding: Funding for the 1985-86 fiscal year included \$44,756 from CAPP and \$48,000 in matching funds. Funding for the 1986-87 fiscal year included \$25,955 from CAPP and \$38,000 in matching funds.

Curriculum areas: Mathematics and English, utilizing a computer-assisted instructional (CAI) program. The CAI program consisted of PLATO's basic skills (Grades 3-8) and high school skills (grades 9-12) software; diagnostic tests tied to computer curriculum; and a central management system.

Direct participants: Seventy-five tenth grade Leuzinger students or 10% of the sophomore class were targeted to participate in the project. Students identified as those who were potential college candidates but were achieving slightly lower than their appropriate grade level were invited to apply for admission to the project. Since student participation was totally voluntary and extended outside the regular class schedule, participation rates were barely 40 students each semester. The project was expanded to other grades (9-12) in order to fully utilize the available equipment. The following chart provides the ethnic distribution of students participating in the project for 1985-86.

For the second year of the project (1986-87), the distribution of students included fewer Hispanics (30%) and more recent Asian arrivals and filipinos (45%). The percentage of Blacks and Whites remained relatively unchanged (10% each year).

Grade levels: Ninth through twelfth grades.

Primary methods: Students were identified and given pre- and post-tests using standardized math and language tests from the CTBS (Comprehensive Tests of Basic Skills) battery. Students would then utilize a computer assisted instructional program before and after school relying on the assistance of tutors from the community college and Leuzinger High School. Positive motivational

incentives were awarded on a weekly basis utilizing individual and corporate donations for gifts. Once a student reached the twelfth grade, he/she was eligible to participate in an internship program through Northrup Corporation.

17. COMPREHENSIVE MATH AND LANGUAGE ARTICULATION AND TUTORIAL CENTER PROGRAM

Participants:

Southwestern College
Sweetwater Unified High School District
San Diego State University

This project's goal was to establish a district-wide peer tutoring system using revised mathematics-related curricula developed collaboratively by secondary and postsecondary institutions during the first 12 months of the project. The second 12 months were devoted to replicating the same strategies for all language skill areas of the curriculum.

Funding: Funding for the 1985-86 fiscal year included \$57,661 from CAPP and \$76,000 in matching funds. Funding for the 1986-87 fiscal year included \$46,406 from CAPP and \$76,000 in matching funds.

Curriculum areas: Mathematics during the first year and language arts the second year.

Grade levels: Seventh through twelfth.

Primary methods: Workshops for staff, parents, and students were conducted to disseminate the products, refine articulation strategies, and provide general information on the goals of the project. Schools were selected to participate in the project using students' standardized test performance, population characteristics, and school-site administrators' interest in the project. The project's objectives were to: (1) develop and disseminate a comprehensive curriculum articulation guide in math and language disciplines. (2) Increase the number of secondary students, particularly minority, which meet community college and CSU admissions requirements and who matriculate to Southwestern College and San Diego State University. (3) Increase the number of students who enroll in and satisfactorily complete college preparatory courses. (4) Increase the number of student placements in college level courses in mathematics and math-related areas. (5) Increase the percentage of students who qualify for college-level math courses by their scores on the Entry Level Math (ELM) exam at San Diego State University.

18. SCIENCE AND ENGLISH CURRICULUM PROJECT

Participants:

Newark School District
California State University, Hayward
Ohlone College

This project, which lasted one year (1985-86) was designed to "address the need to increase the college going rates of Hispanic students."

Funding: Funding for the 1985-86 fiscal year included \$37,256 from CAPP and \$83,000 in matching funds.

Curriculum areas: Selected science and English courses.

Direct participants: Hispanic students were to be targeted to receive tutorial assistance. The students were to be identified based on their scores on the CTBS. Students were to have scores above the 65th percentile. A total of 376 students, from seventh to twelfth grades, were identified as potential participants. Fifty-six percent of those identified were female and 44% were male. Two English teachers and one science teacher were involved in the project in 1985-86. Two local Hispanic community members acted as student counselors in the project.

Primary methods: Due to the project's premature withdrawal, none of the objectives were completed as planned.

19. SOCIAL STUDIES AND SCIENCE CURRICULUM DEVELOPMENT AND IMPLEMENTATION IN THREE STRANDS

Participants:

Vacaville Unified School District
SUCCESS Consortium
University of California, Davis
University of the Pacific
Sonoma State University
Solano Community College

The project's plans were to revise the district's social studies and science curricula in three strands: the concepts, the writing skills, and the critical thinking skills associated with social studies and science.

Funding: Funding for the 1985-86 fiscal year included \$50,900 from CAPP and \$63,000 in matching funds. Funding for the 1986-87 fiscal year included \$43,920 from CAPP and \$66,000 in matching funds.

Curriculum areas: Curriculum development in social studies and science.

Grade levels: Sixth through twelfth grades.

Primary methods: The project utilized inservice workshops for teachers, college students as tutors, counseling orientation in partnership with the SUCCESS Consortium, curricular development and revision, forums and seminars for students and teachers, team teaching, field trips, summer programs for students, and conferences for teachers.

20. SHARP: STOCKTON HONORS ADVANCED PLACEMENT RECOGNITION PROGRAM

Participants:

**Stockton Unified School District
University of the Pacific**

The SHARP project included curriculum revision, teacher inservice training, and tutoring and academic support for students.

Funding: Funding for the 1985-86 fiscal year included \$54,472 from CAPP and \$52,000 in matching funds. Funding for the 1986-87 fiscal year included \$37,571 from CAPP and \$112,000 in matching funds.

Curriculum areas: The project focused on curriculum development for honors and advanced placement courses across a wide range of subject areas: mathematics, science, English, and social sciences.

Grade levels: Twelfth grade.

Primary methods: Teacher inservice training included staff development on such topics as clinical teaching, teaching critical thinking skills, group study skills, and the relationship between teacher expectations and student achievement. Honors and advanced placement classes were added to the curriculum of Franklin and Edison High Schools. Tutoring was another primary method.

PROJECTS FUNDED IN 1987

**Language and Content Enrichment: Academic Partnership
for Curriculum Development (English and social studies)**

Participants:

California State University, Long Beach
Huntington Beach Union School District
Long Beach Unified School District

Project Description: The key activities of this project will include:

- (1) Collaboration of high school and university faculty on peer coaching to improve classroom communication and content comprehensibility;
- (2) Analysis of curriculum materials and developmental guidelines for materials that will build on language experiences and develop academic English skills;
- (3) Integration of a literature-enriched curriculum in English and history/social studies, college preparatory classes;
- (4) Collaboration among high school and university personnel to develop strategies for teaching success learning and study skills;
- (5) Yearly identification, scheduling and monitoring of students participation in the program; and
- (6) On-going counselling of participating students and families, particularly in the context of evening homework coaching and tutorial.

Academic Partnership in Science Education

Participants:

California State University, Los Angeles
Pasadena Unified School District
Pasadena City College

Project Description: To coordinate tutoring program staffed by PCC students.

Approximately 150 students from three Pasadena junior highs were selected during the months of March and April 1987 to participate in enriched Life Science and Physical Science classes during 1987/88 academic year. These classes were specially designed for these students to enhance their skills in reading in the content area, writing, and math during a Summer

Institute for curriculum development to be attended by the faculties of Muir and Pasadena High Schools, CSULA, and Pasadena City College. The Summer Institute's goals included the planning of science curriculum tailored specifically to the needs of underrepresented in postsecondary education students, the integration of information and techniques in the sciences from the University into the high school classroom, and the preparation of special instructional modules implemented by University faculty in the high school classroom.

This enriched curriculum in Life and Physical Science was implemented during the academic year with the support of the high school counseling staff, the faculty, and university and city college instructors who were both consulted on the curriculum and presented lessons in cooperation with the science teachers. Formative evaluation of the project, based on measures of student achievement on evaluation, guided the project's Advisory Committee in any course adjustments. Summative evaluation reports, the presentation of the curriculum, a portfolio of curriculum-referenced "science wonder and magic" laboratory procedures, and presentations on strategies for increasing student success in college preparatory sciences will be shared periodically with local school boards, faculty groups, county offices in curriculum development and science education, and other professional associations locally, regionally, and nationally during the three initial years of the project.

Academic Partnership to Develop Model Math and Science Curriculum

Participants:

California State University, Bakersfield
Bishop Joint Union High School District
Delano Joint Union High School District
Porterville College
Porterville Unified High School District

Project Description: This partnership, designed to extend over three years, will represent an effort to articulate math and science curriculums between high schools and two colleges. In the first year a Faculty Team composed of college and high school teachers will (1) review and revise extant math and science curriculums, (2) devise model curriculums, and (3) cooperatively teach these model curriculums on-site at the participating high schools. In the second year, the Faculty Team will train additional high school teachers in using the model curriculums. Cooperative teaching will again be a component of the second year effort, however, with less involvement by college faculty. In year three, the faculty team will familiarize junior high school math and science teachers with model curriculums, and assist junior high school teachers

in revising curriculums in order to articulate junior and senior high school math and science courses.

Academic Partnership: Teaching for Transition
from High School to College (English and social sciences)

Participants:

Dos Palos Joint Union High School District
California State University, Stanislaus
Merced Community College
Oro Loma Elementary District

Project Description: This project focuses on Language Arts and Social Studies courses to develop a model for curriculum revision to be used in all departments. Elementary, high school and college instructors will revise curriculum content and practices, develop a matrix of skills and competencies to be taught in each course grades 6 through 12, and actually teach the courses together through the use of the Television Learning Network, a live interactive system linking the high school in the university sixty miles away.

Mid-City Writing Project:
An Across the Curriculum Academic Partnership

Participants:

Oakland Unified School District
University of California, Berkeley
East Bay Consortium of Educational Institutions

Project Description: The vehicle is an across the curriculum writing program centered in language arts, social studies and science. The methods include teacher re-training, intervention counseling, the development of a peer writing coach cadre, together with a high degree of parent and community involvement. Key to the project's success will be the development of an effective portfolio assessment model and a uniform procedure for the evaluation of student work. One of the major outcomes of the project will be the establishment of a Demonstration Writing Academy at Bret Harte for teachers and students. Another is the widespread dissemination of the program's formats to schools inside and outside the Oakland District.

The program will involve extensive curriculum revision and at least a doubling of the amount of required writing.

**Academic Partnership for Improving
Life Science Instruction and Postsecondary Access**

Participants:

**Samuel Merritt College of Nursing
Oakland Unified School District**

Project Description: Our proposed project for improving the quality of life science instruction and student access to postsecondary education will expand and secure an already existing partnership between the College of Nursing and Oakland Public Schools. The goals of this project involve curriculum development, faculty cooperation, and student exposure, growth and success.

We have committed students and faculty and an excellent and supportive Steering Committee to address the lack of life science expertise in the Oakland Unified School District, especially in the areas of anatomy, physiology, and health science. We wish to stretch beyond textbook learning to inquiry approaches which empower students with knowledge and concept depth. We wish to develop study skill units and a peer tutoring development project which will train and support our students in the academic habits needed for excellence. We see the need to develop a real academic partnership which directly affects science instruction not only in the Health Academy, but also in the Oakland District at large.

Through a series of faculty and student symposia, classroom presentations and visitations, tutoring and student study group relationships, shadowing and role model experiences, and activities which increase knowledge and self-esteem, we will encourage and create opportunities for life science and health curriculum development and exchange, sharings of teaching strategies and methodologies, classroom peer faculty coaching, compilation of a local life science resource guide, and co-understanding of the needs and realities of both high school and college classrooms.

**Academic Partnership to Provide Intervention
Strategies Improving Academic Preparation (mathematics)**

Participants:

**Oroville Union High School District
Butte Community College
California State University, Chico
Oroville Elementary School District**

Project Description: Program components include a restructuring of the current math curriculum. This goal will be accomplished

through in-service training of educators, including a minimum of four guest instructor sessions in the classroom setting, a summer math institute aimed at improving educational strategies and the development of a peer tutoring program, where selected high school students will serve as cross-age tutors and role models for other students. Restructuring the curriculum will facilitate the goal of improving student academic preparation for postsecondary education.

Student workshops, conducted to improve test-taking strategies and build student test skills, and career planning, matching student interests with appropriate college/career options through testing and counseling, are also vital components of the program. The component of parental involvement, by holding seminars and providing family counseling, are aimed at improving the family setting in relation to students' educational needs and developing motivational strategies to keep interest active within the student.

The gain over time will be a cross-disciplinary increase in student aptitude, thereby, stimulating interest in both completing and furthering endeavors. Because Las Plumas is not unique in regard to drop-out and college enrollment problems, this project is easily replicable, cost-effective, and can be disseminated elsewhere.

SHOWCASE PROJECTS

Project STEP: An Academic Partnership for the Advancement of Learning (mathematics, science and English)

Participants:

University of California, Irvine
California State University, Fullerton
Chapman College
Rancho Santiago Community College
Santa Ana Unified School District

Project Description: Propose to complete development of the STEP model in the Santa Ana Unified School District. CEO designated representatives on the STEP Administrative Council, based on evaluative data have determined a comprehensive set of activities designed to improve instructional methods in mathematics and science, provide earlier intervention involving parents, continue tutorial services and to disseminate the model within the state and initiate adaptation efforts of the model at two specific sites (Compton and Long Beach). The STEP collaborative program strategies will focus on three interdependent functional areas: (1) Mathematics, Science and English academic preparation, (2) Student Academic Support and

Future Teacher Recruitment, and (3) Faculty Forums/ Dissemination. Project STEP will act as a demonstration site for all interested partners who wish to learn about the STEP principles of successful college/secondary school collaboration. We plan to promote and disseminate information re STEP model at appropriate conferences involving every sector of the educational continuum. A specific Dissemination Forum is planned for southern (UCI) central (Fresno) and northern California (UC Berkeley). Documentation and planned dissemination activities form an essential part of the project. The proposal will result in publication of a Handbook for the Establishment of Partnership for the Advancement of Learning which is to be distributed to the 105 California Community Colleges, the 18 California State University campuses, eight campuses of the University of California and all County Departments of Education throughout the state.

Project - Gateways Through Academic Partnerships (mathematic. science and English)

Participants:

Pajaro Valley Unified School District
University of California, Santa Cruz

Project Description:

- . Saturday Science and Mathematics Academy. Seventh and eighth grade students visit the UC-Santa Cruz campus to day-long educational programs conducted by UCSC faculty members and graduate students. Activities provide students with hands-on experience with science and mathematics, encourage participation in science and mathematics studies, and stimulate interest in pursuing postsecondary studies.
- . Summer Science and Mathematics Academy. Students who have completed the ninth or tenth grades are introduced to postsecondary education through a week-long, residential program on the UC-Santa Cruz campus. The Academy's full schedule of classes, laboratory activities, and field trips, conducted by UCSC faculty members and graduate students, emphasizes the integration of science and mathematics through a thematic, cross-disciplinary curriculum. Each student maintains a computer-based journal in an activity which provides feedback on Project activities and encourages writing within science and mathematics.
- . Curriculum Workshops. In the Project Year One, five mathematics teachers participate in an intensive program of staff and curriculum development, focusing on Introduction to Algebra, one of Watsonville High's "gateways" to college preparatory studies. This activity implements District and school plans for strengthening the mathematics program, and

includes participation in UC-Santa Cruz's regional sites of the California Mathematics Project and the California Mathematics Diagnostic Testing Project. Products include a publishable curriculum and a curriculum development process to be applied in developing other "gateway" courses in subsequent years.

- . Project Dissemination. These Project activities include publication of the Introduction to Algebra curriculum, a series of Partnership Reports, and periodical articles derived from those reports. In addition, participants will present Project experiences at educational conference, and the Project will convene a "Monterey Bay Area Conference on Academic Partnerships" on the UC-Santa Cruz campus.
- . Project Evaluation/Assessment. This Showcase Project places substantial emphasis on documenting (and reporting) the Project's effects on participating students, teachers, and school administrators, particularly the effects of providing academic support activities at critical grade levels. Evaluation activities include (a) surveying students' attitudes toward science and mathematics, and postsecondary studies, (b) monitoring the participating students' enrollment and achievement in college preparatory courses, and (c) monitoring changes in the numbers of graduating students who pursue postsecondary studies.

DISSEMINATION PROJECTS

Mathematics Diagnostic Testing Project

Participants:

University of California, San Diego
University of California, Santa Cruz
University of California, Berkeley
University of California, Davis
University of California, Los Angeles
California State University, Fullerton
California State University, Fresno
California State University, Sacramento
California State University, Chico
California State University, San Luis Obispo

Project Description: The project proposes to impact student achievement and math curriculum in secondary schools by making appropriate math diagnostic tests available to interested secondary school teachers for voluntary use with their students. The project provides test materials, scores completed

tests, and returns the results and related diagnostic information to the teachers for distribution to students.

Recent activities of the project have resulted in more involvement and interaction of project staff with the California Math Project, junior high schools, community colleges, and school counselors. In addition, a longitudinal study is underway to document the impact of the project on participating teachers and students.

Reaching University Writing Standards

Participants:

University of California, Los Angeles
California State University, Northridge

Project Description: This proposal will form an intersegmental workgroup to collect analytical assignments and evaluation techniques developed by teachers as a result of their participation in the 1985-87 UCLA-CSUN-Schools Writing Exam project. The group will publish them along with the project's exams, its guidelines for responding to student writing, and the results of its research pilots on the effects of written comments and on ways to help ESL students read and write analytically. After review by experienced university and high school teachers, the book will be introduced to the directors of all the California Writing Project sites, and complimentary copies will be provided to the approximately 400 fellows of the 1988 Writing Projects. They will be able to draw on the book's materials and insights in the in-service work they provide teachers in their schools.

Appendix C

Baseline Data Guide

There are certain categories of information which are common to all projects and others which could be important to the evaluation process. The following list covers both the basic information which is essential that you begin collecting now and a more comprehensive list with areas to be used as a guide for other types of data collection you may consider. (Items marked with an asterisk (*) are those which have been indicated by the California Postsecondary Education Commission evaluator as being essential basic information.)

I. Background and Context of the Project

A. Setting (School and Community Demographic Data)

1. *Population Characteristics (i.e., age, *ethnic/racial composition, *mobility and growth rate, *adult educational attainment)
2. *Economic Characteristics (i.e., *occupations, *unemployment rate, *family income, *tax base, *growth)
3. *School System Characteristics (i.e., *grade level(s) served; number of pupils in system; number of schools; types of schools; teacher/pupil ratio; trends in enrollments (past 5 years); withdrawals and transfers; *curricula at school site-specific courses offered; *academic/vocational split; other special programs at school; *5 years of achievement *(CAP mean scores, *dropout rates, *college going (2 year or 4 year); *college performance and *persistence of graduates)

B. Project Origins (i.e., needs assessment-type/result; determination of priorities)

C. Project Goals and Objectives (i.e., what they are, how they were set and by whom)

D. Historical Background (i.e., project precursors)

E. Target Population

1. *Students (i.e., *age; *gender; grade level; ability level; *ethnicity; number served; selection process for participation; grouping procedures by ability, by class, by school)

2. Teachers, College & University Faculty,
Administrators, Parents (i.e., background,
qualifications, experience, selection process
for participation)

F. Project Personnel

1. *Intersegmental Participation (i.e., *kind;
*full-time/part-time; *qualifications/background;
*role description-administrative, instructional or
support)
2. Training Provided by Project

G. Administration

1. Intersegmental unit with primary responsibility
2. Administrative procedures/staffing

J. Budget

1. Total cost of project implementation (including
CAPP grant)
2. Other sources of project funds
3. Budget breakdown for replication purposes (i.e.,
estimates of startup costs vs continuation costs)
4. Budget breakdown by categories and amounts (i.e.,
materials development, staff training, support
services, information dissemination, staff
salaries, project maintenance)
5. Per pupil/participant cost

II. Planned Critical Project Features-Materials and Activities

A. Major planned program characteristics (outline)

1. Major materials used
2. Activities engaged
3. Persons responsible for implementing each feature
4. Target participants in each activity and how these
will be monitored/tracked
5. Amount of progress projected by a certain time
6. Rationale underlying the project
7. Possibility for replication (i.e., prescriptiveness
of project; possibility of variation)

B. Internal Evaluation

1. Techniques for monitoring and modifying operations on a daily basis
2. Periodic review plans

III. Implementation Evaluation Measures

A. Range of measures and data collection

1. Types (i.e., informal: casual observations and conversations with project staff; formal: systematic observation, questionnaires, *standard test data (CTBS, CAP), *transcript information, description of curriculum changes)
2. Process for obtaining data (privacy act considerations)

IV. Results of Evaluation Measures/Description of Project Implementation

A. Overview

1. Project resemblance to original proposal
2. Materials/audience/implementation
3. Modifications of original proposal
4. Degree to which goals and objectives were met (verification with appropriate data)

B. Specific Findings

1. Materials developed (i.e., types, frequency and location of use, interest/stimulation level, degree to which project goals and objectives were met)
2. Activities (i.e., type, frequency and location of use, interest/stimulation/motivation level, degree to which project goals and objectives were met)
3. Control or comparison group

V. Summary with Major Findings and Recommendations

Beyond this, you should, of course be maintaining a record of expenditures so that the cost of particular facets of your project can be determined. Also, if your objective will require use of a comparison group, you should collect the same baseline information as above on the comparison group.

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